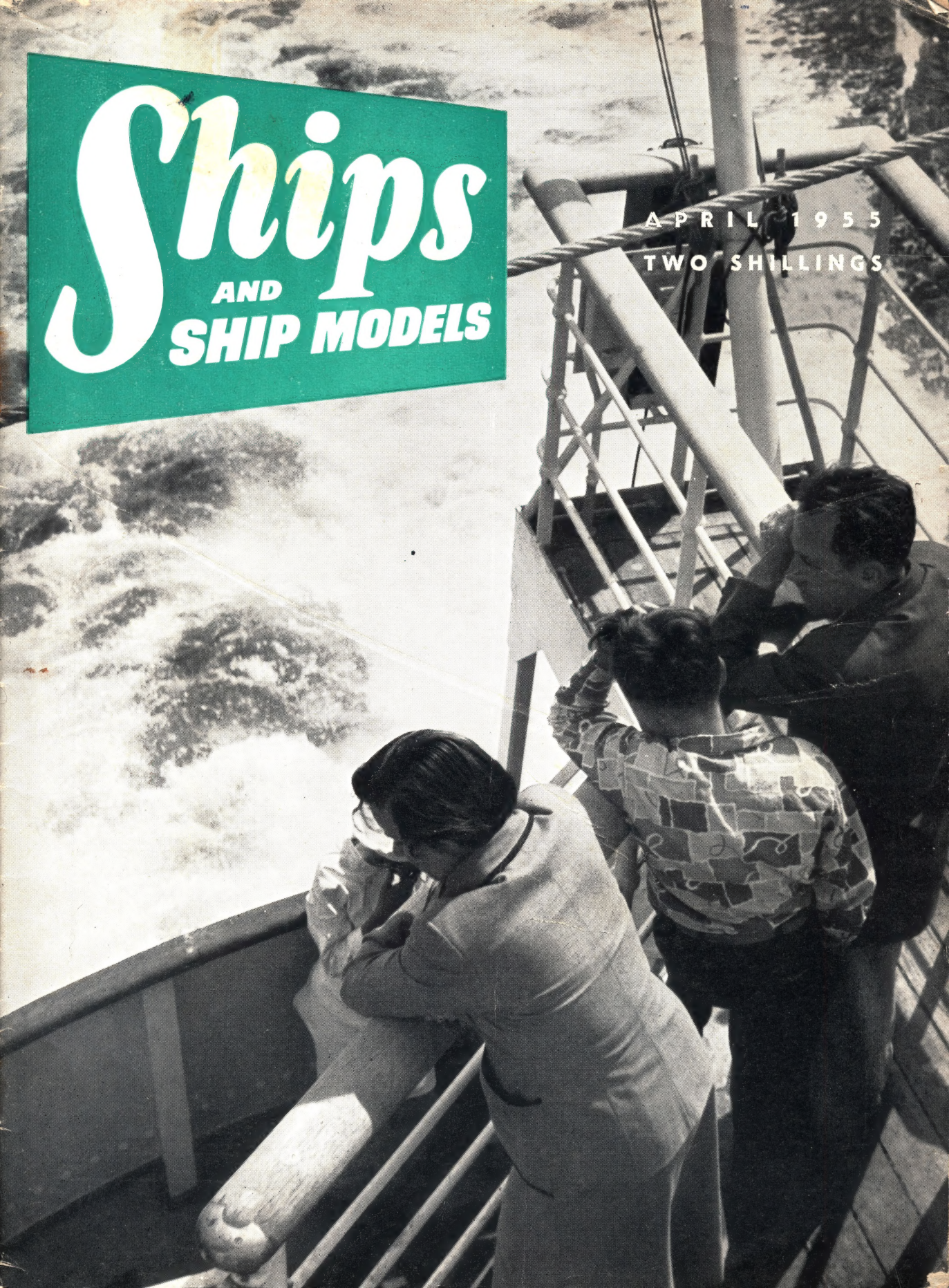


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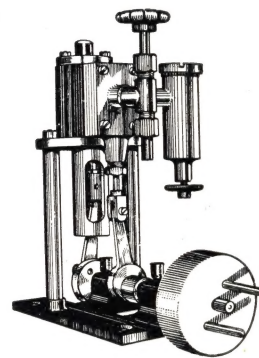
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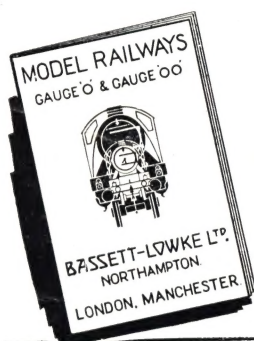
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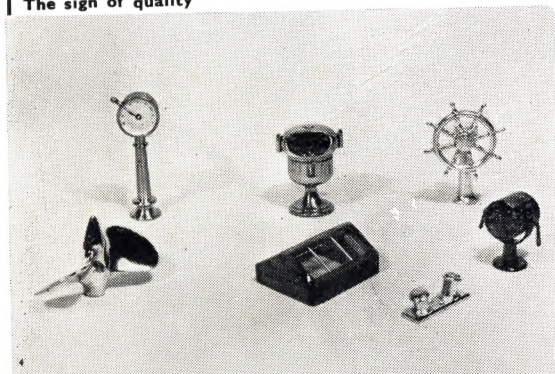
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Ships AND SHIP MODELS

INCORPORATING MODEL SHIPS & POWER BOATS

Vol. VIII. No. 87. APRIL 1955

THE SHIP'S LOG

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Advertisement Manager
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The summer is approaching and plans are already being made by most of us to enable us to attend the regattas and meetings in which we are specially interested, without encroaching unduly on our holidays and similar domestic dates. Foremost among the dates is that of the Model Engineer Exhibition which is held in the Royal Horticultural Hall as usual, from Wednesday, August 17th, to Saturday, the 27th. Those who are sending in models for competition will, of course, see to it that their entries are ready *before* the sending-in day, so that they will have time to examine them at leisure for the little faults that are so often overlooked, and have time to correct them. Entry forms are sent automatically to last year's competitors, but others should send in their names and addresses in good time so that entry forms may be sent them as soon as they are ready. Regular exhibitors who have changed their address since the last exhibition should send their new address to the Exhibition Manager at this office, so that their entry forms do not go astray. It would help the Exhibition Manager greatly if entry forms could be sent in as soon as they are completed. There is always a rush at the closing date, as most competitors wait until then.

A special appeal is made for entries for the Duke of Edinburgh Cup. This is the highest award in the exhibition and can only be won by an outstanding model. The model must have won a cup or silver medal at a previous Model Engineer Exhibition not less than three years ago.

For the power boat man and the speed fan a very important date is that of the Grand Regatta at Victoria Park, which is held on Sunday, August 28th, on which date many model engineers are in London as the Model Engineer Exhibition closes on the previous evening. This regatta usually attracts over 100 entries, and many of the finest prototype models are to be seen under power, not to mention the hydroplanes in the speed events.

For the sailing man an important date is that of the Thames Shiplovers' Society's Rally for prototype models. This has previously been held at Hove, but this year the venue is the Round Pond, Kensington Gardens. Usually all rigs are represented, from smacks to square riggers, and a race will be staged for spritsail barges, a number of which have been built to $\frac{1}{2}$ -in. scale so that they can race together.

The model yachtsman will be interested in the dates and venues of the various national championships which are listed on the Club News page.



Why I sailed

BY ALAN VILLIERS

The "Joseph Conrad" under studding-sails in the South China Sea

"WOOD barquentine *Elisabeth* just in market. Consider firm offer of £400 might secure. Strongly recommend." The cablegram from Denmark fluttered to the floor while I thought of it. The barquentine *Elisabeth*! She was just the sort of ship I wanted. For years, ever since the *Parma* paid so well, and some of my books had hit the best-seller lists, I'd planned to get hold of a ship of my own—a ship I could afford to live in, and keep, and wouldn't have to bother about finding cargoes for. A ship, too, which could safely be sailed by a bunch of boys, who couldn't help but gain invaluable from the experience. But what sort of ship? A schooner or a ketch would be fine for a home: but not for boys. You need a yard or two for boys. The old stuff of struggling aloft with the canvas has its uses, and there's nothing like the sense of achievement it can bring. Stowing a big fore-and-aft mainsail between gaff and boom on deck wasn't the same thing at all, though it, too, has its value.

A tops'l schooner might do. I'd looked at a number in places as far apart as Wicklow in Ireland and the waterfront at Papeete, in Tahiti. But I hadn't seen a good one, not anywhere. There was a sturdy two-master called the *Isabella* at Par, in Cornwall. She'd been a china-clay carrier. But she was rather run down when I saw her and would have cost thousands to put right again, for deepwater stuff. And I didn't want a ship I'd have to make a houseboat out of.

Wood barquentine *Elisabeth*—now, there was something. I knew the *Elisabeth*, or I thought I did. She was a stout three-master built of good Danish oak at the famous port of Marstal. She was about 300 tons, and she carried a full square-rig on the fore course, double tops'ls, single t'gallant, and a minute royal above that. Just the rig for boys—ideal for ocean voyaging, too. There was the square-rig for Roaring Forties stuff, running the Easting down and all that; and there were enough fore-and-afters for wind'ard working. I'd thought about a barquentine, and I'd looked at some of the French Grand

Bankers that were being thrown on the discard then. But those I saw were either too big or too derelict. And they stank of codfish so heartily that I didn't see how anyone would ever get rid of the stench again.

So when I got that cable I hopped across to Copenhagen as fast as I could go, which was by the night ferry over the North Sea to Esbjerg and by train from there. When I got there, all steamed up to get a good barquentine for £400—£400! you couldn't get a good used automobile for that up to a few months back—I found that my agents had an *Elisabeth* all right. But she was the wrong *Elisabeth*. That is a favoured name for small ships in Baltic waters, and there were at least half a dozen sailers of the name. The one on offer was a softwood wreck from Estonia, which was kept together by chains which passed around her timber cargo, right around the ship and the cargo, to make sure the two stayed together—all right for the Baltic in summer months, maybe, but useless for deepwater. She was hogged and she was ripe, and her inventory was non-existent. She *had* had a pretty hull, once, and I suppose at £400 the agent was entitled to recommend anything. But I walked sadly away from his little office on the Havnegade. True, the agent had spoken hopefully of a lugubrious schooner called *Alf* and had extolled the virtues of an ancient galleass from Elsinore. The *Alf* could be had for £200; but it is never any sense to buy a liability. She'd have cost £2,000 to make over.

So I wandered down to the waterfront by the Langelinie. I like the Copenhagen waterfront. I've always thought it one of the best in the world, and in those days—this was 1934—there was generally a big square-rigger of some kind anchored in the Roads. The Erikson ships used to come up from Australia and dry-dock in Burmeister and Wain's, at Copenhagen, after they'd put out their cargoes of bagged grain. Old Man Erikson had them sail on up to Mariehamn, where he could keep an eye on them

the 'JOSEPH CONRAD'

The figurehead—a portrait bust of Joseph Conrad—was carved in New York by Bruce Rogers



Boys under instruction in the "Joseph Conrad"



and do the marine superintending himself. Besides, Copenhagen was full of schooners and ketches. There were some old wooden walls still in the Greenland trade that were rigged as barques.

This day there was a full-rigged ship lying not out in the Roads, but right inside, off the Langelinie, near an old Greenland brig called the *Tialfe* that the rowing club was using. She was the smallest full-rigged ship I'd ever seen, and I looked at her with interest. After a 3,000-ton four-masted barque, she looked almost ludicrous. A fellow could stand on her mizzen t'gallant yard and unship the mizzen royal, and it looked as if he could walk down the rigging with the yard on his back. (She wasn't actually quite *that* small.) But as I watched, she got under way. There must have been nearly 100 boys aboard, and how they could handle her! The beautifully cut sails were on her as if they were on a press-button system; the yards swung as one; she answered like a splendid little yacht, and from being one moment at anchor with nothing set, the next moment there she was, under every stitch, daintily picking her way through the crowded shipping of the harbour.

Then I heard a fellow say she was going to be broken up, as they couldn't find a buyer for her as a going concern.

I took one more quick look. Then I jumped in a taxi. Barquentine *Elisabeth*? Schooner *Alf*? Galleass *Brynhilda* and all the other multitude of vessels I had been offered—they could go, the whole fleet of them. I'd never for a second contemplated buying a full-rigged ship for the simple reason that I'd no idea one could be in the market. And if one had been, of course it didn't really make sense to buy a vessel of that rig. A barquentine you might get by with, taking along—I'd figured—three good men and a bunch of boys. But a ship was a vastly different proposition. My barquentine would get along with a good mate, a good cook, and a good bos'n who could also do the necessary shipwrights' jobs about the deck, and help with cutting new sails. But a ship would need a dozen good hands. Besides, this ship—I didn't even know her name, then—was a real

old-timer, with deep single tops'ls and irons for stuns'l booms, and a lot of rigging to chafe and cost large sums for replacements. She'd wooden spars, and deep sails, outboard boats, vulnerable decks, where they were pierced for skylights and the necessary companionways to give access for her horde of boys. Outboard boats don't stay long on a Cape Horn passage, and vulnerable decks would be a headache. Wooden spars carry away. I'd been used to those great steel sailers, steel and iron to the trucks, where even the running rigging was mostly heavy wire.

And where was I going to get fellows who understood a single-tops'l full-rigged ship that looked as if she'd sailed as consort to Bligh's *Bounty*? The principles, of course, were still the same, for fundamentally the *Victory* sails the same as the *Danmark*. Handle one, and you can handle the other. But all those complexities of rig in the old-timers, the multitude of bewildering leads, the stuns'ls and all their gear, the tackles for the boats—why, they'd take a bit of thinking out.

Besides, what could you do with a full-rigged ship, with a big paid crew aboard, eating their heads off and likely to become a dreadful liability in any port on earth? Where to go? How to finance the voyage? A barquentine or a tops'l schooner would be different. And it was no use even thinking of making a "dude" out of her, even if I'd wanted to, which I did not. You can't mix "dudes" and sailormen. It's one or the other. You can get by with a "dude" schooner (though very, very few have); but with a full-rigged ship—never. Sir Francis Drake had trouble with what he called the "mariners and the gentlemen." When there's work to be done, they don't always mix.

I get a bit tired of the fellows who say, "Why, the world is full of chaps who'd give any kind of money if they could just sail—sail in a real ship." Well, maybe it is. But I've never caught up with any of them. Think it over a minute. If you have a big ship and you plan to make a voyage, and advertise the project, who are you going to take a mighty chance on getting? Why, the misfits and the psychopaths, those who can't stay home and those that home can't hold. You'll get applications from an almighty proportion of such, of all ages and both sexes. You'll get good ones too. But life isn't long enough to sort them out. And one dud in a "dude" enterprise is enough to kill it.

I chewed all these things over while I wandered along towards the agent's, in that taxi. But I'd decided what to do. I'd buy that ship, if she really was for sale, and do the other worrying afterwards. She was not going to be broken up.

She was for sale. The price was £1,500. I bought her.

Now, I knew as well as anybody and better than most, that I'd bought a lot of grief. I also knew that I'd bought, at an incredibly low price, a really beautiful ship. Her name was the *Georg Stage* and she was a privately managed Danish school-ship for boys. She'd accommodation for 80 boys, and though a survey had shown that a few plates had slight weaknesses, she was built of Swedish iron when ships were ships, and she was good for another twenty years



The "Joseph Conrad" was designed for boys

The "Joseph Conrad" was formerly the Danish school-ship "Georg Stage." Photo taken obviously on washing day



at least. As for a good Cape Horning crew, I knew where to get them. I'd picked out a few from the *Parma* and others of the grain-racers. At that time there were plenty more up in Mariehamn, around Hamburg, and in Copenhagen itself. There were still several sailing fleets in existence—Eriksons, the German house of Laeisz in the nitrate trade, the West Indies logwood barques that Captain Carlsen of the *Flying Enterprise* served his time in. I got hold of a good sailmaker, good mates, a good Finnish carpenter, a bunch of AB's, a steward and a cook. I'd time to do this, because it was June when I saw the ship and bought her, and I wasn't getting delivery until the August. She still had a course of boys to train.

In the couple of months or so I had, I did some serious thinking, and planning. Where *could* I go? I'd thought of taking the old barquentine across to the West Indies or down to the Med., in a leisurely

fashion, and, maybe later, into the South Seas, and ambling across from Peru in the wake of Pedro Ferdinand de Queiros, the great Portuguese who sailed to the Solomon Islands centuries ago and almost stumbled upon Australia. But it was certain that I couldn't do anything leisurely with a full-rigged ship. She'd cost too much to run. I reckoned the only thing I could do was to have a crack at sailing her around the world. There was nothing very brilliant in that idea. But I figured, if I went out around Good Hope or beat to the west'ard round the Horn (and the thought of those vulnerable decks and wooden spars deterred me a bit from that), I might as well make the full round of it—either east'ards before the west winds, or west'ards before the Trades. That's what big sailing-ships are designed for.

So that's what I did.

To be continued

TOPICAL DIGEST

Launching of H.M. Submarine "Excalibur"

Her Majesty's submarine "Excalibur" was launched on February 25th, 1955, at the Barrow-in-Furness Yard of Messrs. Vickers Armstrongs Ltd., this firm being responsible for both hull and main machinery.

The "Excalibur" is a sister ship to H.M.S. "Explorer" launched at the same yard last year and now undergoing trials. These submarines have a modern version of the usual battery and main motors for underwater propulsion, but in addition to their diesel-electric machinery both ships are fitted with turbine machinery for which the energy is supplied by burning diesel fuel in decomposed hydrogen peroxide.

Of an extreme length of 225 ft. 6 in. (178 ft. between perpendiculars) the "Excalibur" has a beam of nearly 16 ft.

She is being fitted with the latest submarine escape arrangements, including the one-man escape chamber and the latest breathing apparatus designed for escape purposes.

Girls Build Their Own Boats

A fleet of at least a dozen sailing dinghies and canoes are at present in the making by teenage girls. These are being planned and built by Sea Rangers (part of the senior branch of the Girl Guide Movement) in various parts of the country, and their crews hope to enter their craft for the big two-day handicraft exhibition which is to take place at the Central Hall, Westminster, on April 29th and 30th, 1955.

Big New Trawler for Hull is Launched

The steam, oil-fired trawler "Marbella," built to the order of J. Marr and Sons Ltd., of Hull, sister ship to the "Lancella," which was delivered to her owners in July, 1953, was launched from the shipbuilding yard of Cook, Welton and Gemmell Ltd., at Beverley, on Friday, February 11th, 1955.

To be registered at Hull, she has the following dimensions: Length (registered), 189 ft.; breadth moulded 32 ft.; depth moulded 16 ft. 3 in.; gross tonnage approx. 800 tons.

The propelling machinery will be supplied and installed by Charles D. Holmes and Co. Ltd., of Hull.

"Cutty Sark"

The Timber Trade Federation is trying to help the "Cutty Sark" Preservation Society by making timber for the ship's refit at Greenwich available at low cost. It is hoped that much of it will be supplied free.

Thames Barge Presented to London Boy Scouts

The Thames sailing barge "Normanhurst" has been presented to the London Boy Scouts by Group Scoutmaster Lieutenant-Commander H. Pinnell, a former mayor of Lewisham. It is hoped ultimately to make the barge a floating headquarters for the London group, and negotiations are now in progress to secure a permanent berth for her. This may be near the Festival Hall.

Service Held in "Ark Royal"

A commissioning service was held aboard the aircraft carrier "Ark Royal," 36,800 tons, at Birkenhead on February 22nd. It was conducted by the Ven. F. N. Chamberlain, Chaplain of the Fleet. Civic leaders from Merseyside and Leeds attended. Leeds has "adopted" the ship.

Among those who took part in the service were workmen who helped to build the carrier. The Rev. J. W. B. Moore, R.N., read the lesson, taken from Psalm 107, "They that go down to the sea in ships."

In response to the traditional Navy bidding by Capt D. R. F. Cambell, who commands the carrier, the ship's company said three times "We fear nothing." On February 25th, the "Ark Royal" left for her acceptance trials.

Five Thames "Old Ladies" to Retire

Five "old ladies" of the Thames—the ferry-boats "Rose," "Catherine," "Tessa," "Mimie" and "Edith"—are to be withdrawn from service. They have carried more than 3,000,000 passengers across the river between Gravesend and Tilbury every year. Now they are to be replaced by diesel vessels. A British Railways official said "We hope that the new ferry-boats will be ready for service by next year."

"Milford Duke" May Be Sold to France

The only large diesel trawler still operating out of Milford Haven, the Milford Steam Trawling Company's "Milford Duke," entered dry dock recently to undergo a survey prior to her expected sale to M. Mallet, of Dieppe. The Duke's sister ship, the "Milford Duchess," was purchased by the same French firm last June.

NEW YORK

WITH the coming of the new season there are a number of interesting changes on the North Atlantic. One of these will result in the calling at Southampton of a liner hitherto not seen in Britain for a number of years. This is the Greek Line's t.s.s. *New York* (ex *Nea Hellas*) which has been transferred to the North Atlantic service and will in future operate between Bremerhaven, Southampton, Cherbourg, Halifax and New York, also making calls at Cobh and Boston. She takes the place of the *Olympia*, which on January 5th left New York on her last eastbound trip to Southampton and Bremerhaven and which is now running between Greece, Mediterranean ports and the States.

During the winter the *New York* was given a major overhaul at Piraeus which lasted 25 working days and employed 600 men. Much of her passenger accommodation has been reconstructed, as a result of which she now carries 73 first and 1,369 in the tourist class. The term stately is not one that can justly be applied to every liner yet it is this that seems most appropriate, both for the exterior appearance and for the lovely public rooms where an almost regency flavour blends successfully with contemporary. Renamed to coincide with her entry into the North Atlantic service, the *New York* sailed from that port on March 25th on her first voyage to Southampton, where she is due on April 3rd.

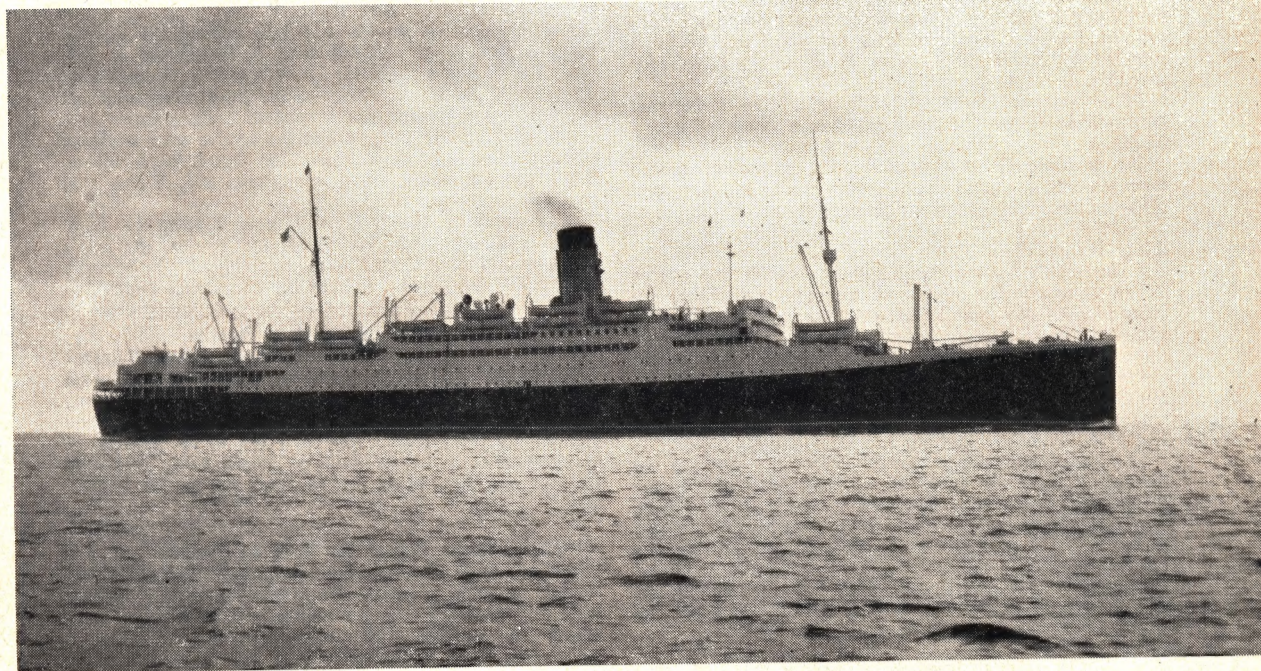
The ship which has a gross tonnage of 16,991 (24,000 tons displacement) has an average speed of 16 knots. She was previously well known as the Anchor Line's *Tuscania*; as such she was used prior to the war years both on that company's Clyde/New York and Indian services, while for a period she was also operated by the Cunard Line between London and New York. An interesting personal link between the two liners *New York* and the *Olympia* is that they are commanded by brothers, the former by Captain John Polemis and the other by Captain Stamatīs Polemis.

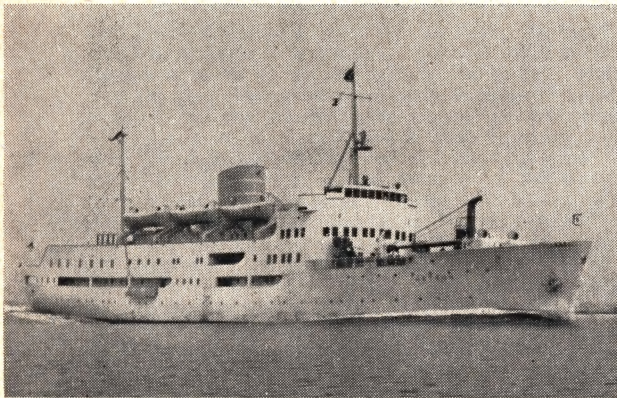
HUBERT

The Booth Steamship Co. Ltd. have lately taken delivery of a new liner, the 7,898 ton *Hubert*, which has been designed for their passenger service from Liverpool to Leixoes, Lisbon, Madeira, Barbados, Trinidad, Belem and Manaus. The ship was built and engined by Cammell Laird & Co. Ltd., and commenced her maiden voyage on February 11th. Like the *Hildebrand* of which she was originally intended to be a sister, she has her funnel and superstructure slightly aft of amidships. After the keel was laid, however, it was decided that to suit changed trading conditions it was necessary to modify the passenger accommodation as well as the refrigerated cargo space. As a result the *Hubert* carries 74 first and 96 tourist class passengers, compared with the *Hildebrand's* figures of 50 and 118 respectively.

She measures 405 ft. in length b.p., by 60 ft. breadth, by 27 ft. 6 in. depth, and has a deadweight capacity of 7,718 tons on a draught of 24 ft. 6 in. As the illustration shows, the hull—which has five holds—is surmounted by a long fo'c'sle and poop. Two decks, the main and upper, are continuous, while there is a lower deck except by the fifth hold. Besides these, there is an orlop deck in No. 3 hold. Here the lower hold, orlop and lower 'tween decks are insulated to the extent of 46,000 cu. ft. for refrigerated cargoes, of which bananas form an important item. Like

SHIPS





M.V. "Meteor" designed for cruising in the Norwegian fjords

the earlier vessel, the *Hubert* is fitted with a Thornycroft type smoke-deflecting funnel top, two single kingposts and a foremast which carries a 50-ton derrick.

The propelling machinery, which is designed to give a service speed of about 15 knots, consists of a set of 2 stage turbines connected to a single shaft through D.R. gearing. Steam is provided by two Babcock and Wilcox boilers at

in the news

450 p.s.i. and 750 deg. F. The first class passengers are accommodated amidships on four decks. Their state-rooms have either one or two beds, while the majority have their own private baths or showers and toilets. Public rooms comprise a lounge, smoking room and verandah café on the promenade deck, a children's playroom above and a dining saloon at the forward end of the superstructure at upper deck level.

The tourist class passengers have their accommodation—mainly in two and four berth cabins—on the main and upper decks aft and in the poop; also their own public rooms. The name *Hubert* was last borne by a cargo ship built just after the war. Renamed *Cuthbert* in 1951, she was transferred last year to the Austasia Line and now operates as the *Mandama*.

Left: The Greek Line's t.s.s. "New York" which has been transferred to the North Atlantic service to replace the "Olympia"

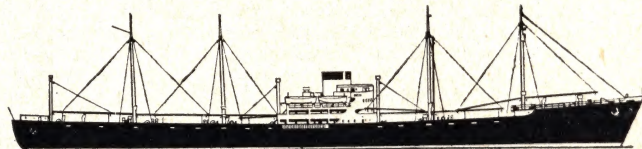
Right: M.V. "Khuzistan" built for Frank Strick & Co. Ltd., to operate on their service to the Persian Gulf

NORTH GERMAN LLOYD PURCHASES

History repeats itself with the return to the German flag of various surrendered ships. The latest example concerns the purchase by the North German Lloyd of three large cargo liners which they ordered from Cockerills of Hoboken in 1942 but which were subsequently taken over first by the Belgian Government and then by the Cie Maritime Belge. These are the *Bastogne*, *Houffalize* and *Stavelot*, each of 8,065 tons gross, handsome four-masted ships with a service speed of 17 knots.

The *Stavelot* and *Houffalize* were launched while the Germans were still occupying Belgium, but were scuttled by them before the retreat. Refloated and completed, they entered the C.M.B.'s Antwerp-New York service in 1946. The last of the trio, the *Bastogne*, was launched on February 14th, 1946, and completed during the autumn of the following year.

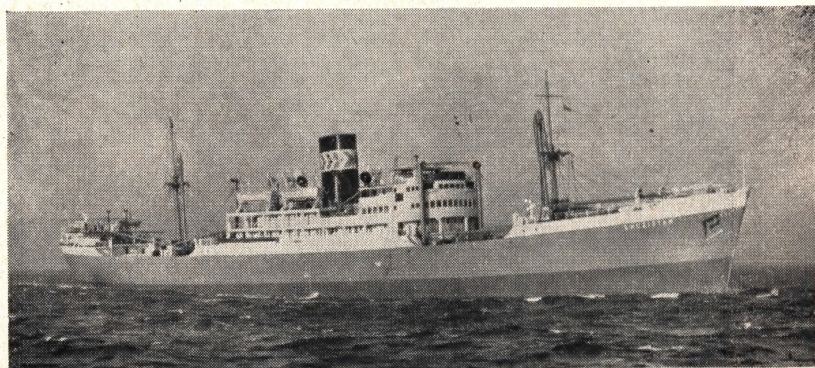
They were remarkable ships in many ways. The North German Lloyd was traditionally fond of four masted vessels, yet it seemed rather surprising that in such large ships they should prefer these to kingposts. The choice of triple screws for large cargo ships was also unusual. Although tank tests showed that twin screws offered less resistance, the service for which the ships were required called for a relatively low speed for certain short stages. Here, with triple screws the centre one alone could provide sufficient power, while the others—fitted with mechanical clutches—could run idle. Each ship was



The RAVENSTEIN, REIFENSTEIN & ROTHENSTEIN as they will appear in their North German Lloyd colours

fitted with three 6-cylinder Cockerill-Sulzer type diesels, the centre one developing 4,200 b.h.p. compared with the 3,900 b.h.p. of the wing ones. The main hull dimensions were: length overall 546 ft. 3 in., breadth mld. 64 ft. 4 in., depth mld. to shelter deck 42 ft. 2 in. These figures gave a d.w. tonnage of 10,857 tons on a draught of just under 29 ft. Each ship had six holds, served by no fewer than 27 electric winches. Beneath No. 4 hold there was also a deep tank for the carriage of palm oil. The accommodation for their crew and 12 passengers was all placed amidships, either in the short high superstructure, or, in a few cases, on the deck below.

The *Bastogne*, which was due to be handed over to her new owners in mid-March, will be renamed *Ravenstein*. She will be followed a month later by the *Stavelot* (to be *Rothenstein*)



and at about the end of June by the *Houffalize* which will then become the *Reifenstein*. The East Asiatic Co., with the *Kambodia* (ex *Brandenburg*), and the Cie Generale Transatlantique with the French-built *Washington*, *Winnipeg* and *Wyoming*, own vessels of generally similar calibre which, in similar manner were originally ordered by the Hamburg-America Line. They, however, have a more conventional two-masted profile.

KHUZISTAN

The m.v. *Khuzistan* is the latest of a long line of cargo ships—33 in all—which have been built by John Readhead & Sons Ltd., South Shields, for Frank C. Strick & Co. Ltd. Designed to operate on their regular service to the Persian Gulf, she has a gross tonnage of 7,523 and a d.w. capacity of about 9,600 tons on a light draught. Her length is 459.8 ft., breadth 58.5 ft. and depth of hold 28 ft. 3 in.

Like most of her forerunners, the *Khuzistan* is of the three-island type, but she and her earlier sister *Baltistan* differ from the others of this layout in being diesel-driven. They are powered by a 4-cylinder N.E.M.-Doxford type engine of 4,400 b.h.p., which gives a service speed of 13 knots. For auxiliary purposes two Scotch boilers are also fitted. The profile of these two ships also varies from that of their forebears in that they have a longer forecastle and superstructure. The length of the bridge deck remains virtually unchanged, but the bridge house, which on the others was set back some 30 ft., has been brought forward that distance, so that No. 3 hatch comes abaft and not before this structure. The cargo handling equipment is elaborate, and comprises 15 derricks of 5 to 10 ton capacity, as well as one of 30 and 50 tons capacity. The *Khuzistan* is fitted with three refrigerated chambers for cargo, one of which is adapted for "deep freeze."

The Captain, officers and five passengers are accommodated amidships, while the Indian crew are berthed aft in the poop space, where a large deckhouse above contains their messrooms, etc. All the accommodation is fitted with Thermotank heating and ventilation, while that amidships also has air conditioning. The *Khuzistan* is the first of this name to be owned by the Strick Line, whereas most of their ships bear traditional names.

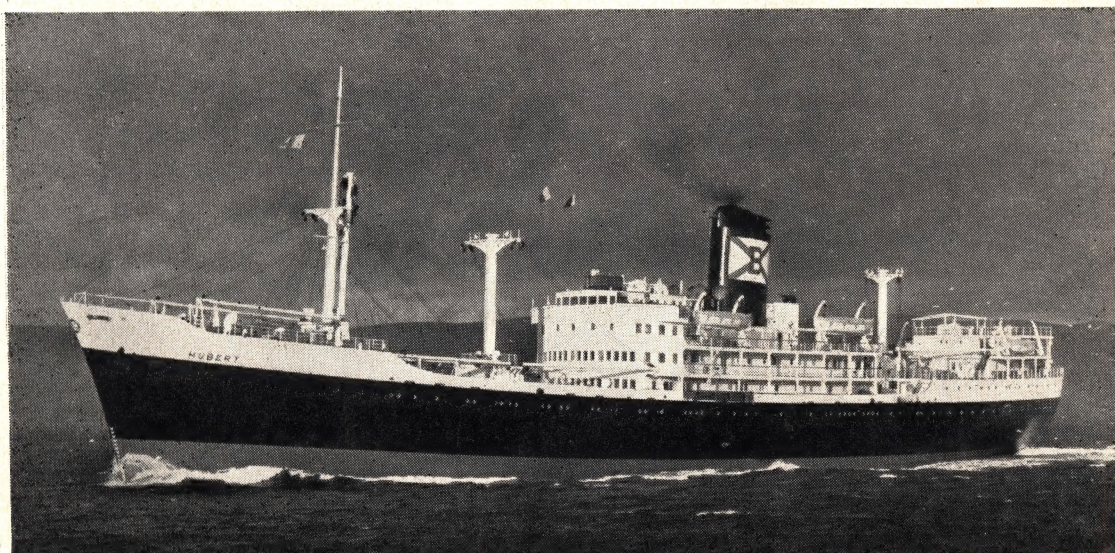
METEOR

It was in 1879 that the Bergen Line introduced their cruises to the Norwegian fjords and North Cape and since then it has owned many ships specially designed for such work. Notable among these were the *Meteor*, 3,717 tons, an ex German steam yacht bought in 1921 and the lovely and yet larger *Stella Polaris*, built in 1927, a ship whose elegance and cuisine brought her world fame. The *Meteor* fell a victim to the war; requisitioned by the Germans, she was sunk in Pillau Harbour in March, 1945.

Now the Bergen Line has taken delivery of a new *Meteor*, a ship of around 2,800 tons gross and 18 knots speed. She has been specially designed for summer cruising in the Norwegian fjords and to North Cape, while she will vary these with occasional trips to the Northern Capitals. Her size enables her to penetrate the narrowest fjords and stay in the sheltered coastal waters inside the string of islands which stretch along this coast. Delivered in January, the ship, however, has proved to be remarkably steady in bad weather and well fitted for her winter duties as relief ship on the Norwegian coastal services. Then she will not only take the place of the Bergen Line's ships as they are withdrawn for overhaul or survey, but also those of the other lines operating on the Bergen-Kirkenes run.

The ship, which measures 296 ft. in length overall by 45 ft. mld. breadth, is a product of the Aalborg shipyard. A single B. & W. 9 cylinder turbo-charged diesel drives a Kamewa variable-pitch propeller. The number of passengers carried on cruises will be limited to 157, for whom there are 49 double and 59 single cabins. At the top there is a sun deck which has a verandah cafe and bar aft and an observation lounge forward. All the other public rooms, as well as two de luxe cabins are on the deck below the promenade, the after part of which is occupied by the dining saloon. This is divided into three sections by light partitions and extends the full width of the ship. The passenger cabins are situated beneath, on the upper, main and A decks. Forward there is a single hold which is served by three deck cranes, one of which is on the centre-line and of considerable size. The *Meteor*, in common with the company's earlier cruising vessels has a buff funnel, but with the addition of the familiar three white rings which have hitherto only appeared on their black funnelled ships.

The Booth Steamship liner "*Hubert*," designed for passenger service from Liverpool to the West Indies. Photo by courtesy of the owners





A JERSEY SHIP MODEL

A DESCRIPTION OF THE
RESTORATION CARRIED OUT
BY COL. G. A. BEAZELEY, D.S.O.

THE photograph is a picture of a large ship model in the Ship Room of the Jersey Museum.

The hull was carved out of a solid block of wood, in 1870, and was based on the latest design for commercial full-rigged ships built in the shipyards, in Jersey, and is an actual ship-builder's model. It was made by a Mr. Philip Le Huquet of St. Martin's parish. It has very fine lines.

In 1882 a Mr. Francis Le Boulillier conceived the idea of starting a navigational school for young seamen and between 1882 and 1885 constructed all the masts and spars, the standing rigging and some of the running rigging and made use of the model in his school.

Then iron and steel built ships began to supersede wooden vessels, the shipbuilding industry in Jersey languished, and the model was laid on one side and neglected for nearly 60 years.

When a young married couple took over the house in which the model was stored they had no use for it, and on October 15th, 1950, they brought it to the Museum and handed it over to the committee,

when Lt. Col. G. A. Beazeley, D.S.O., offered to complete the model and was given a free hand. The model was filthy and it took him 4 days to get it clean. Then for 6 days in the week, from 9.45 a.m. till 6 p.m. he worked away at the model and completed it on June 5th, 1951, when it was named by Mrs. Amy Le Boulillier in a ceremony attended by the Committee and a number of the members of the Societe Jersiaise (to whom the museum belongs) were present.

A good deal of the rigging was rotten and had to be replaced. All the sails, the deck fittings and nearly half the blocks had to be made with the exception of the wheel, steering mechanism and housing.

The model has been put in a large glass case to preserve it.

There is a crew of 14 on board but the men are too big for the size of the ship and are being replaced.

Some idea of the size of the model can be realised from the dimensions. From the tip of the jib-boom to the stern is 7 ft. 7 in. From the mainmast truck to the keel is 5 ft. 6 in.



The first stage—The British customs at Southampton are negotiated with very little fuss. Even a small handful of dollars is willingly exchanged for sterling



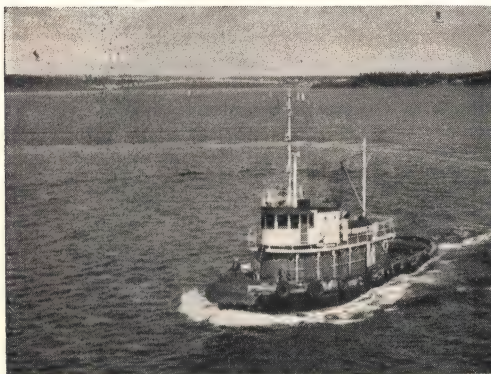
It's an overcast day, but there is plenty of cover from the custom sheds to the ship. As the cranes continue to deliver luggage and mail, last minute farewells take place at the entrance to the gangway



The tug is hitched to the stern and we prepare to leave Southampton at 5 p.m. . . approx. two hours behind schedule



After a smooth first stage of the journey we drop anchor at Cobh and watch for the tender, packed tight with Irish passengers



We approach Halifax, Nova Scotia, in Canada, and the pilot boat turns alongside to guide us in



We unload at Halifax. This vehicle came aboard at Cherbourg and now descends to start work on a new continent



Thirty-six hours from Halifax, New York City ahead!

★ A GREEK LINE

T.S.S. Olympia takes GORDON

The General Steam Navigation Co. Ltd., of Greece, operates four Greek Line passenger ships on the Atlantic—T.S.S. *Canberra*, T.S.S. *Columbia*, T.S.S. *Nea Hellas* and T.S.S. *Neptunia*. At the end of 1953 a fifth ship was added, the T.S.S. *Olympia*, with a gross tonnage of 23,000 and a speed of 22 knots.

My wife and I were scheduled to return to the States, and as we had travelled the Atlantic before, by Cunard Line's *Mauretania* and *Queen Elizabeth*, we wished to have a change and to try something smaller. The travel agents eventually decided us on the *Olympia*. It was a comparatively new ship (Ed. travelled May 23rd, 1954), had two classes, First and Tourist, the bulk of the passengers being of the latter.

The ship's route commences from Bremerhaven, then to Southampton; Cherbourg, France; Cobh, Ireland; Halifax, Nova Scotia, Canada;



YEARLING

S. SMITH and his camera on a trip across the Atlantic

Boston and New York, U.S.A. The trip took about seven and a half days.

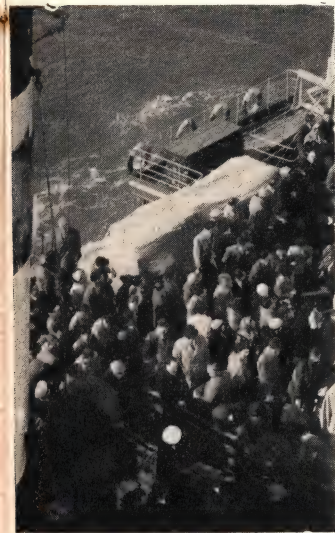
This was longer than the "Queens" or the *United States*, but, there was never a dull moment aboard. Breakfast generally started the day around 8 a.m., and if one wanted to limber up beforehand, there were the gymnasia. At 9 a.m. it was time to shake the meal down with deck games and then relax around 10 a.m. and snooze through the recording hour with Wagner, or listen to the Promenade Concert held on upper deck aft, if the weather was fine. During this period each day there was a ship's run sweepstake—my wife won \$5.40, the share with three others. But, of course, the really energetic could play in the table tennis tournament until 12 noon, when lunch was served.

At 1 p.m. there would be more recordings, and at 1.45 p.m. a film show in the Olympic Theatre—it had a balcony just like its big brothers in

London. At 3.30 the children had a tea party in the Zebra Room (no grown-ups without their children, please!). At 4 p.m., for the other adults, there was tea in the Mycenaean Room or the Olympian Hall.

There was horse racing in the Derby Room; music in the Pavilion; Measure at the Bar in the Taverna; or Cocktail de Musique Americaine in the Atlantic Bar; Bingo in the Zebra Room; Accordion Nights in the Aegean Bar; and a Fancy Dress Parade—need I say more—and at 10.30 p.m. a late night snack.

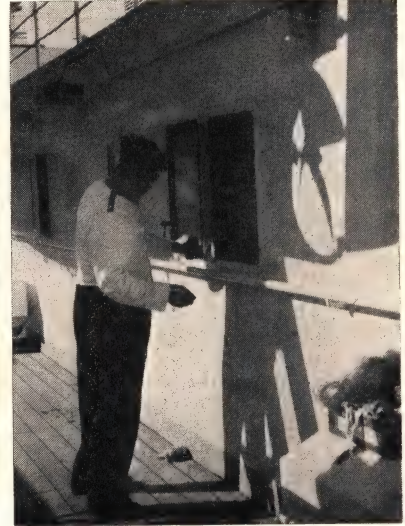
Through the night we travelled at 20 knots or more, and in the morning found we were 500 miles nearer our destination than the same time yesterday. Then came the morning of mornings, with Lower Manhattan skyline coming into view. But let the picture-story tell of the happenings as seen from the decks of the Greek Lines yearling, *Olympia*.



Packed tight it is, too, yet the calm way the passengers leave reminds me of a Sunday outing—not an Atlantic crossing



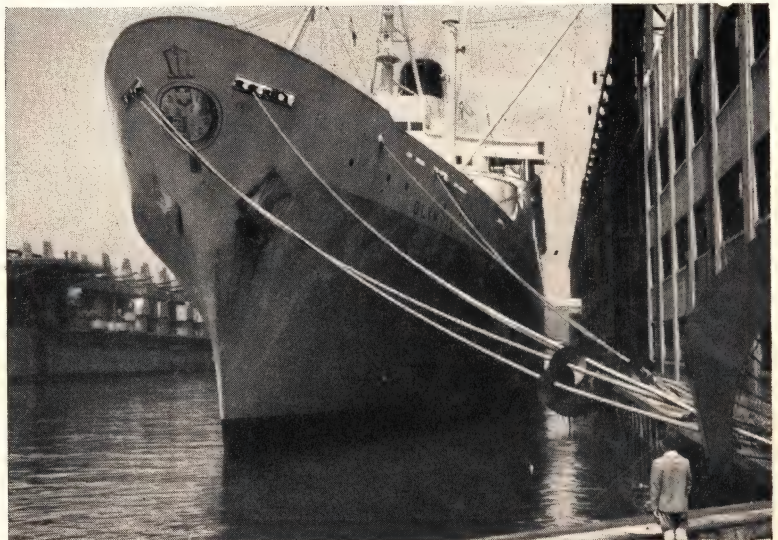
As with every port we enter and leave, the ship's band takes up a deckside position and plays rousing tunes—the crossing has now begun



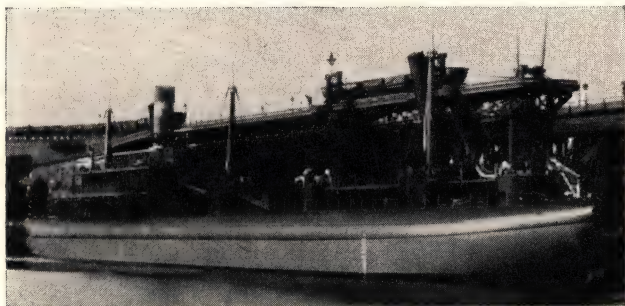
And still the maintenance goes on . . . cleaning the metal surrounds to the first class cabin windows



New York at last. A view of Mid-Manhattan with the Empire State Building to the right, Chrysler Building to the extreme left and the "United States" at her berth]



A last glimpse of the "Olympia" with a younger member of our generation admiring her with all the enthusiasm of his elders . . . one day perhaps he will sail in her



No. 1. S.S. "Sagamore" built by Doxford & Sons in 1892.
A typical whaleback ship

TO the general public, the caravel of the 15th century is better known both by name and in form than the turret design of vessel which reached the zenith of its popularity barely fifty years ago. Of all the young mates who will sit for Masters' Tickets this year, the probability is that few will ever have seen a turret ship; while it is a safe bet that not a man of them has sailed in one.

It is indeed curious that recollections of the turret ships should so speedily have grown dim, that records and photographs should have become so difficult to obtain, bearing in mind that the design marked a radical development in the cargo carrying trade.

At the turn of the century, there was a popular belief in maritime circles that the turret deck idea had been sired by Ferdinand de Lesseps and, as not infrequently with popular beliefs, there was a modicum of truth in it. Dues were bearing heavily on regular users of the Suez Canal so it was natural that shipowners, especially of freighters, should have pressed for a design of vessel which would reduce tonnage assessment without substantially affecting the capacity/deadweight ratio. In point of actual fact, this was a prime desideratum of shipowners quite apart from the specific Canal question. That very progressive and alert profession, naval architects and draughtsmen, met the problem with their usual high inventiveness in the last decade of the 19th century. To the famous Sunderland firm of William Doxford & Sons goes the credit for designing the first turret vessel under "Doxford's" patent in 1892. (Detailed reference will be made to the prototype, s.s. *Turret*, in due course.) In 1911, when the last ship of this type was built, there were upwards of two hundred turret deck vessels using the seas. Today, Lloyd's Register shows only seven "turrets" in service. Of these, only one is under the British flag and at least one is thought to have been broken up in the interim.

It is as well at this juncture to remark briefly on the four main types of ships used as general cargo carriers when "Doxford's" patent came into being in 1892. These were: (1) spar deck, (2) three deck, (4) awning deck and (4) well deck. Reference need be made solely to the well deck vessel which was considered as the ideal deadweight carrier of the period. The design was simple in conception—a

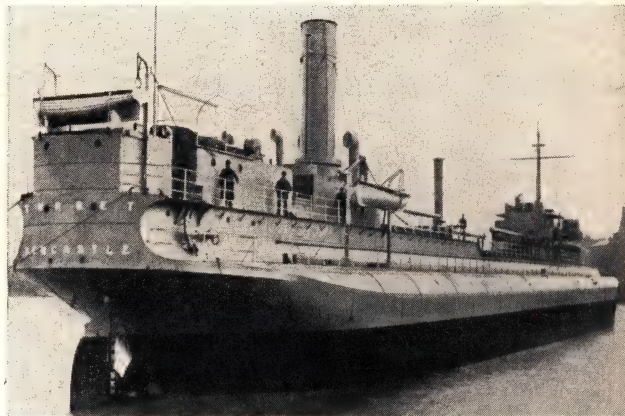


Photo by permission of H.M. Stationery Office
No. 2. S.S. "Turret" the prototype of this class of ship

The TURRET

BY JOHN W. HARRIES

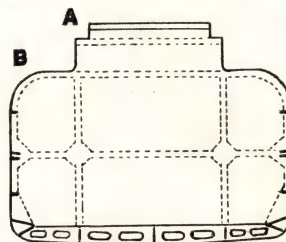
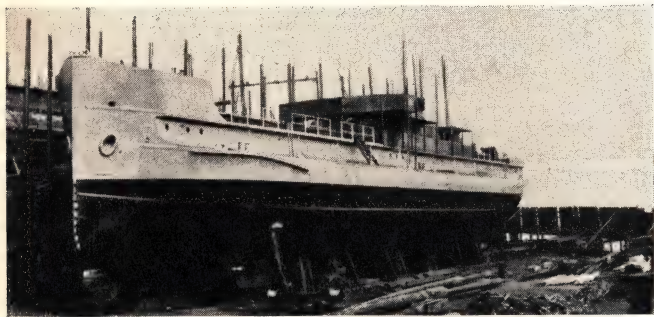


Fig. 1. Midship section
of a typical turret ship
A—Turret deck
B—Harbour decks

small break between the forecastle and the long superstructure aft. The purpose of the well deck design, it is said, was to prevent seas sweeping over the full length of the vessel. As none of the four designs mentioned was considered to be a good general purpose vessel, British shipping circles turned their attention to the whaleback steamer. This class of vessel, first built in the United States in the 1880s under "McDougall's" patent, was enjoying a success in the American coastwise trade. It is indeed held by some British naval architects that the turret vessel was the direct descendant of the whaleback.

A typical whaleback ship, the s.s. *Sagamore*, gross tonnage 2,309, net 1,801, is shown in Photo. No. 1. Built by Doxford's under "McDougall's" patent in 1892, the photograph does not, unfortunately, reveal the spoon bow or the stem sharply cut away under water. The whaleback was a very radical development with its upper deck having five cylindrical turrets which carried the deckhouses and allowed access below. The hatches were small, being covered by single steel plates bolted to the deck. The disadvantages of the whaleback design were fairly obvious yet the claim was made in the States that it was the answer to the prayers of owners and builders.



Above : No. 3. S.S. "Turret Hill" showing the conventional underwater hull of a turret ship

Right : No. 4. S.S. "Turret Bay," note whaleback forecassle and deck cargo on both harbour and turret decks

SHIP

A little-known type of vessel is discussed and illustrated as a stimulant to ship modellers to record the passing of another phase in maritime history.

And, when in 1891, the whaleback steamer, *Charles W. Wetmore*, was the first of her type to make the Western Ocean crossing, it was hailed as a great success. This subject can now safely be left after noting that if the *Charles W. Wetmore* was the first whaleback to make a deep sea passage, it was also the last.

The prototype of the Turret class was the s.s. *Turret* (Photo. No. 2) of 1,969 tons gross, 1,265 net, with a draught loaded of 18 ft., built by William Doxford & Sons, c. 1892. Few vessels of this actual type were built. Photo No. 2 should be viewed alongside Fig. 1 which gives a midship section of an average turret design ship. The differences rather than the resemblance to the whaleback (Photo. No. 1) should here be mentioned : s.s. *Turret* was a raised turret deck ship, 280 ft. \times 38 ft. \times 22 ft. 9 in., with a displacement of 4,500 tons and a service speed of ten knots. Instead of the spoon bow of the whaleback, she was provided with a straight stem. There was no sheer either on the turret or on the harbour deck. The harbour decks were bare with the exception of bollards, small coaling ports and light protection rails. All the erections and hatches were on the turret deck. Attention is drawn to the first method of ending the turret which was soon to be changed to the conventional counter stern, as will be observed in subsequent photographs. *Turret* had her foremast placed very far forward, the engines were aft and the turret deck raised, arrangements seldom followed in later construction. A point to be noted is that though the vessel appears to be in ballast, and notwithstanding the after placement of her engines, there is no appreciable trim. The early type of gravity davit can be seen which permitted the lowering of the boats clear of the harbour decks. The forecassle—out of view in the photograph—was turtle decked.

Among the advantages claimed for the new-born turret design, as outlined by Mr. N. A. Roberts, B.Sc., in his paper read before the King's College Society of Naval Architects, Newcastle upon Tyne, in 1953, were : "A high navigation platform on which all vulnerable openings were placed ; the turret was an excellent feeder and the curved gunwale made for efficient stowage at the most dangerous point ; great strength with a smaller steel weight than usual ; water could not lodge on deck in a position where it might tend to capsize the vessel ; and, as mentioned earlier, a low tonnage combined with a good capacity/deadweight ratio." Some of

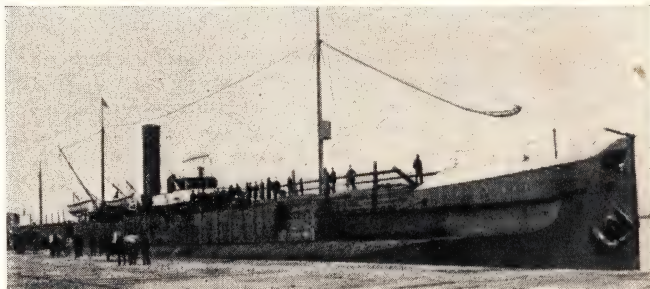
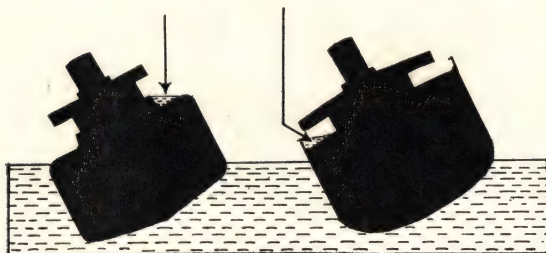


Photo by permission of N.E. Coast Inst. of Engineers and Ship Builders

these professional claims for the turret design of sixty years ago are supported in part by the list of turret vessels still in service today. This list, furnished by courtesy of Mr. Manley of Lloyd's Register, includes the gallant old veteran, *Turret Cape*, built in 1895. She is now owned by Colonial Steamships Ltd., Toronto, Ontario, and sails under the name of *Walter Inkster*. After nearly sixty years of toil and stress and strain, surely this is a tribute to William Doxford & Sons, designers and builders, who could produce not only a revolutionary design but who could translate it by staunch and enduring workmanship into a monument to British shipbuilding.

The stability of the Turret class vessels was and remains open to debate. One expert predicted that the s.s. *Turret* would capsize in heavy weather. Against this, it was argued by other experts that the stability curves for (1) a turret, (2) a whaleback and (3) a conventional hull, showed ranges of 96 deg., 68 deg., and 73 deg. respectively. The technical viewpoint is illustrated in Fig. B, which sets out to prove that deck water on a conventional vessel was more hazardous than on a turret. Whatever opinions are held on this subject, the strength of construction of the turret ship *qua* ship has never been questioned. Two examples may be advanced in proof thereof: The immense longitudinal strength of these turret ships was evidenced during the launching of one which stuck on the way ends for ten tides and received small local indentations only. (Memories have failed regarding the name of this vessel but it is believed that she was built to the order of the British India S.N. Company and was intended to serve as a collier.) Then there was another turret, the s.s. *Inverness*, ashore in May, 1923, on Bornholm Island and which remained fast for over a week. She was towed off and repaired at Copenhagen, sailing again

DECK WATER TENDS TO
RIGHT TURRET SHIPDECK WATER TENDS TO
CAPSIZE ORDINARY SHIP

in a matter of five weeks. This could so easily have been a heavy casualty and proved the capacity of British-built turret vessels to withstand punishment.

"The Master could walk the harbour deck in carpet slippers, however heavy the weather" was a dictum in the shipbuilding yards. Whilst giving full credit to the staunchness of turret vessels in general, this statement was manifestly absurd. "Slightly exaggerated," as Mark Twain remarked about the premature Press notice of his decease.

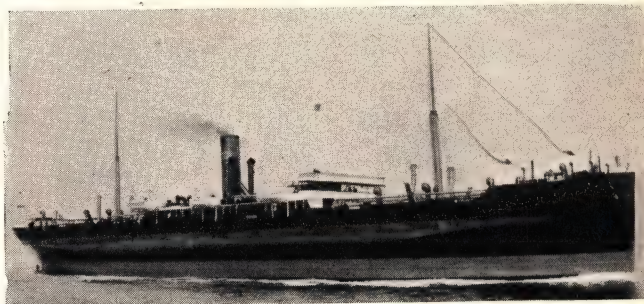
A voyage of twenty thousand miles in a turret ship allows, perhaps, scope for comment on the seagoing qualities of the class: Sailing from the Clyde and Mersey in December with a general cargo for South African and Portuguese East African ports; thence in ballast across the Indian Ocean to Acheen Head; down the Malacca Straits and up the South China Sea to Saigon; a full cargo or rice homewards to Dunkirk via Colombo, Suez and Malta—any seaman will confirm that a voyage of this nature, and with a sailing from the U.K. in mid-winter, could provide a variety of testing weather for any and every type of vessel. By and large, the turret vessel was a dry ship but this did not prevent her butting into a head sea like one of the Sunlight soap boxes which she carried about the world. And, could she roll? Let it be admitted, however, that waddling along in tropical calms, it would have been possible for the Master to walk the harbour deck in his carpet slippers.

Photo. No. 3 shows the underwater hull of a turret ship. This is the s.s. *Turret Hill* built by Doxfords in 1893/94, gross 691 tons, net 419 tons, she capsized and sank in May 1914. The s.s. *Turret Bay*, Photo. No. 4, reveals the demand for larger vessels of the design at 2,211 tons gross, 1,376 net. She possessed points of interest in her whaleback forecastle (discontinued in later construction), the deck cargo carried on both harbour and turret decks and—strange admixture of ancient and modern—a staysail on the forestay. With the s.s. *Clan MacDonald*, Photo. No. 5, we have reached a development in the Turret class from which there was to be little variation in the twelve remaining years of their construction. She was built c. 1898 by Doxfords with a gross tonnage of 4,839, net 3,113, and a speed of 12 knots. Sir Charles Cayzer, the first Baronet, and head of Cayzer, Irvine & Co., managers of the Clan Line steamers, was a firm believer in this class of vessel, and no less than thirty turrets were built by Doxfords for his

Left: Fig. 2. Diagram illustrating effect of deck water on turret ships as compared with conventional type of ship

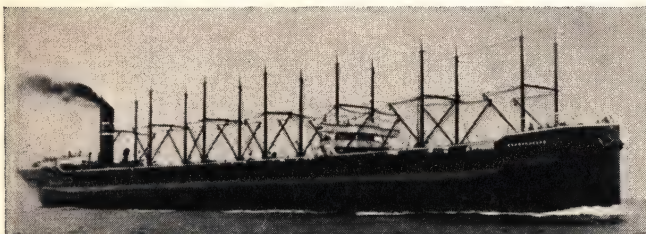
Below: No. 5. S.S. "*Clan MacDonald*," one of thirty turret ships built for the Clan Line

Right: No. 6. S.S. "*Grangesburg*," an ore carrier of 10,000 tons d.w. with gear for rapid handling of cargo



company. Being a very shrewd man, Sir Charles, in 1896, took several turret steamers on time charter and, on the satisfactory experience gained, placed order after order regularly for several years. Our last Photo, No. 6, is included owing to the unique outline and specialised functions of the vessel shown, a genuine turret, but specially constructed by Doxfords as an ore carrier of 10,000 d.w. The s.s. *Grangesburg*, built in 1901, gross tonnage 6,749, net 4,379, could discharge her cargo with her own gear in twenty-four hours.

The first intimation of the s.s. *Clan Ranald* disaster was contained in a telegram from the Harbour Master at Edinburgh, South Australia to the Marine Board at Port Adelaide stating that a vessel was drifting towards shore about two miles out, abreast of Troubridge Hill. A second telegram from the same source followed very soon afterwards that the vessel had sunk and that most of the crew were drowned, including the Master. The date was January 31st, 1909, the weather being fine and clear with a strong breeze from the SSE. An iron-schooner-rigged turret steamer built in 1900, of 2,286 tons register, the *Clan Ranald*, laden with about 6,500 tons of grain and flour, had in addition about 70 tons of coal on the turret deck—50 on the starboard side, 20 on the port side, also 50 tons on both sides of the fiddle deck. Sailing from Port Adelaide at 7 a.m. that day, the vessel had a list of four degrees to starboard which increased to six degrees on reaching open sea. At 2 p.m. she suddenly heeled over to starboard placing that side of the turret deck under water and the ship never righted again. About 5 p.m., the helm was put hard aport in the hope that it would put the ship towards shore. At 8 p.m. the anchor was let go with 90 fathoms chain outside which brought the ship's head to wind and sea, which was described as moderate. The anchor held but the list increased until, at 10 p.m., she sank out of sight. Theories there were by the experts that the entrance of water into



the vessel unknown to her officers could alone account for the sudden heeling over. The first and third officers and the second engineer (who survived) considered that although coal had previously been safely carried on deck, in this instance the weight of the coal on deck coupled with the vessel's six degrees of starboard list on starting, had apparently endangered her stability. The Marine Board of South Australia failed to elicit any evidence which would clearly account for the loss, but were of opinion that an error of judgment was committed in anchoring the ship after she heeled over. Taking every precaution from their side to prevent such capsizings in the future, Doxfords examined in great detail the stability factor of all the turrets they had built and issued loading instructions to all turret owners. The very first of these instructions read: "This vessel is not intended to load down to her marks with a homogeneous cargo without water ballast." It was ignorance or disregard of this instruction which was found to have caused the s.s. *Clan Gordon* to capsize on July 30th, 1919, two days out of New York bound for North China ports via the Panama Canal. The finding of the Court of Inquiry was that: "the loss of the vessel and the consequent loss of life was caused by a serious error of judgment on the part of the Master." Shortly after discharging the pilot, the Master tested the ship for stability by putting the helm hard over each way, and found that she was quite stable. Wishing to improve the ship's trim and thereby to increase speed, also better to withstand anticipated hurricane weather in the Gulf of Mexico, the Master decided to pump out Nos. 1 and 2 water ballast tanks. This was done early a.m. on July 30th, the sea being moderate with a light NNE. wind. During the afternoon, the vessel took a list of five degrees but this in itself occasioned no alarm. At

4.30 p.m., intending to take bearings for compass error, the quartermaster was ordered to port the helm. The vessel heeled over to port to about 60 or 70 deg., and almost immediately capsized. The heeling over occurred so suddenly that the second engineer who was on watch had no opportunity of stopping the engines, and was only able to escape by "walking up the front of one of the main columns." Evidence showed that the vessel was well found and that the cargo of case oil and bags of wax had been properly loaded and stowed. The *Clan Gordon*, a steel screw steamer of 3,588 gross tonnage, net 2,285 tons, was built by Doxfords for the Clan Line steamers in 1900. She was very similar to the *Clan MacDonald* shown in Plate No. 5.

What was the cause which led to the passing of the Turret class of ships? At least three views are held, and readers are left to reach their own conclusions on the question. It has been suggested that the turret design aimed at avoiding the tonnage laws and, because this was so successfully achieved, the tonnage laws were altered, thereby transforming the class into an anachronism. Then there were those who, almost from the inception of the design, maintained that the harbour deck very materially reduced the stability of the vessel. A point tending to support this opinion is that as time went on and experience—some of it bitter—came in, the width of these side protuberances or harbour decks was narrowed in later construction. Finally, it may have been that through no inherent fault in the turret design but just as the prototype, s.s. *Turret*, superseded in effect the well deck vessel, so did the modern and efficient shelter deck steamer replace the turret.

If the 15th century caravel has been kept alive by modellers, a similar service could be rendered to the Turret class of ships. Neither the caravel nor the turret could be classified as aesthetic, yet both fulfilled the mission of their time and, for that reason alone, have a claim to be preserved from oblivion.

Acknowledgments: Thanks are due to Messrs. Wm. Doxford & Sons Ltd., Sunderland, and to the North East Coast Institution of Engineers & Ship Builders, Newcastle upon Tyne, for permission to reproduce the photographs with this article. The author also acknowledges his indebtedness to Mr. N. A. Roberts, B.Sc., for information on the technical side as well as for his personal help and suggestions.

anything interesting?

Seen something unusual? Taken a fine photograph? Found out some interesting maritime information? Made a first-class model? . . . If so "Ships and Ship Models" are keen to hear about it and may pay for the chance of publishing it why not let us know? . . .

THE EDITOR, SHIPS & SHIP MODELS, 19-20, NOEL STREET, LONDON, W.1. GERRARD 8811

CAMBERING DECK BEAMS

THE OLD SHIPWRIGHT'S
METHOD EXPLAINED

BY
R. CHENEVIX TRENCH

One of the hallmarks of a serious scale model is a properly cambered deck. In models where the deck is laid as in the prototype, it is essential that the planks—like their opposite numbers on the ship's side—should have "fair" beams to rest on, and even one-piece decks are all the better for a correct seating.

Now theoretically the line of each beam is the arc of a circle whose chord is the width of the ship inside the frames at the point in question and whose radius is such as to give the necessary "round-up" at the middle line of the ship. See Fig. 1. But in practice the radius of such a circle would be huge—far beyond the scope of ordinary dividers, except in a very small scale drawing. Furthermore, to find the centre for each beam would be a maddeningly long business of trial and error and the whole process was manifestly impossible on a mould loft floor, where everything was chalked in full size.

The method described below is that which was used in the last days of major wooden shipbuilding in England and for all I know it may have always been used, and may still be in use to-day. At all events it is simple and ingenious and admirably convenient for model-makers. It is one of several methods described in Thearle's "Shipbuilding in Wood, Iron and Composite," which states that on account of its simplicity and accuracy it was by far the most common. Here then is the way of it.

First the round-up of the midship beam was decided, since that is the longest beam and hence has the greatest round-up. Its curvature was arrived at as follows (see Fig. 2, which is exaggerated for the sake of clarity):—

On the mould loft floor a line AB was drawn equal to half the length of the beam, measured at the actual ship on the stocks, the point A being on the middle line of the ship. From A a perpendicular was erected, equal in length to the round-up and another perpendicular, BD, equal to AC, was erected at B.

Next AB and BD were divided into the same number of equal parts (four in the case shown) at E, F and G along AB and at O, P and Q up BD. Perpendiculars were erected from E, F and G and CQ, CP and CO were joined. The points where CQ cut EH, CP cut FJ and CO cut GK were for all practical purposes on the arc of the required circle and a batten was pinned to these points and a line swept through them. It only remained to repeat the process on the other side of the middle line to arrive at the camber of the whole midship beam.

Now although the curve of every other beam could have been arrived at by the same process, it was not the custom to do so. The practice was to use the arc of the midship beam for all the other beams in the following way:—

A "beam mould" was made up of battens as shown diagrammatically in Fig. 3. This mould showed the outline of the top of the midship beam contained in a rectangle

whose sides were equal to the width of the ship at the midship section and the round-up of the midship beam. To find the shape of another beam, say, the length LM, this length was simply middled about the mid-point of the mould and perpendiculars were dropped from L and M, meeting the curve at S and T. ST was then the shape of the upper side of the beam where the width of the ship, inside the frames, was LM. Incidentally, LS or MT was known as the "round down" of the beam LM.

Such a mould, drawn on paper, gives a complete and easy guide to the model-maker.

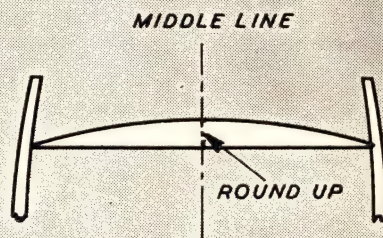


FIG. 1.

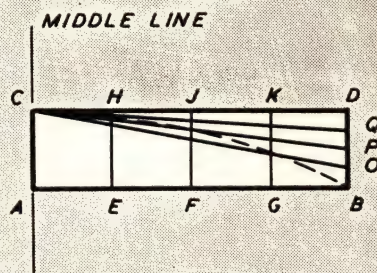


FIG. 2.

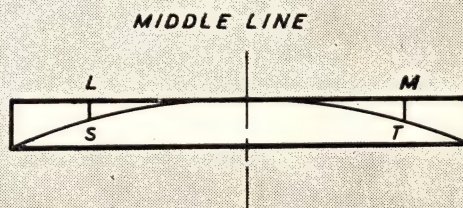
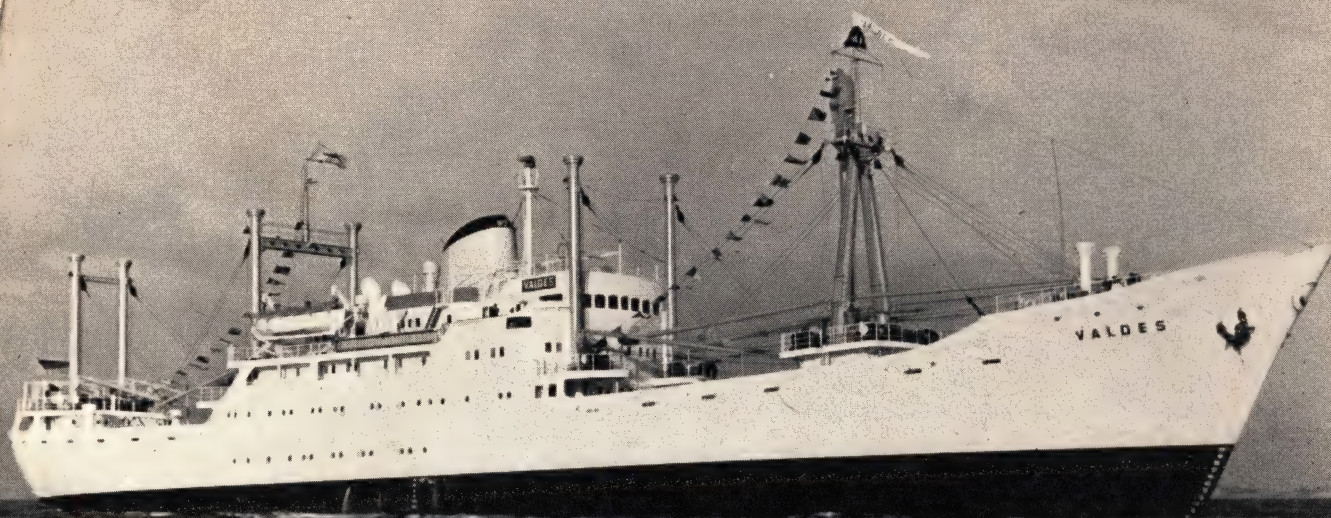


FIG. 3.



The Fruitships

BY LAURENCE
DUNN

VALDES & VELAZQUEZ

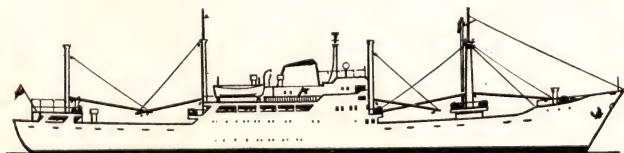
THE MacAndrews Line of London is one of the best known British firms trading to Spain, Portugal and the Mediterranean, and is also one of the oldest, its origins going back to the latter part of the eighteenth century. Outwards their ships carry a wide variety of general cargo, while on the return trip they bring principally fruit and wine.

During the past winter the company has taken delivery of two remarkably handsome looking ships named *Velazquez* and *Valdes*. They have a speed of about $15\frac{3}{4}$ knots and a deadweight capacity of approximately 2,500 tons on a load draught of 18 ft. The vessels, which were built by the Werft Nobiskrug, Rendsburg, have a length overall of 334 ft. $3\frac{1}{2}$ in. (300 ft. b.p.), a breadth mld. of 45 ft. 3 in., and a depth mld. to shelter deck of 27 ft. 4 in. Both ships have Maierform design hulls and are built as open shelter deckers to the highest class of Lloyd's Register. The holds, which are mechanically ventilated for the carriage of fruit, number three in all. Two of these are forward and one aft, and each has its 'tween deck space. At this level and at the after-end of No. 2 hold

there are two refrigerated compartments as well as a pair of special stowage lockers. To ventilate the holds 12 axial type fans are fitted in the trunks of the kingposts, these being controlled from the wheelhouse. The kingposts and masts between them mount ten derricks of three to six tons capacity, while a heavy one, of 30 tons capacity, is fitted to the after side of the foremast. The diesel driven winches working these derricks are all mounted on raised platforms, so that their operators may have a clear view down into the holds.

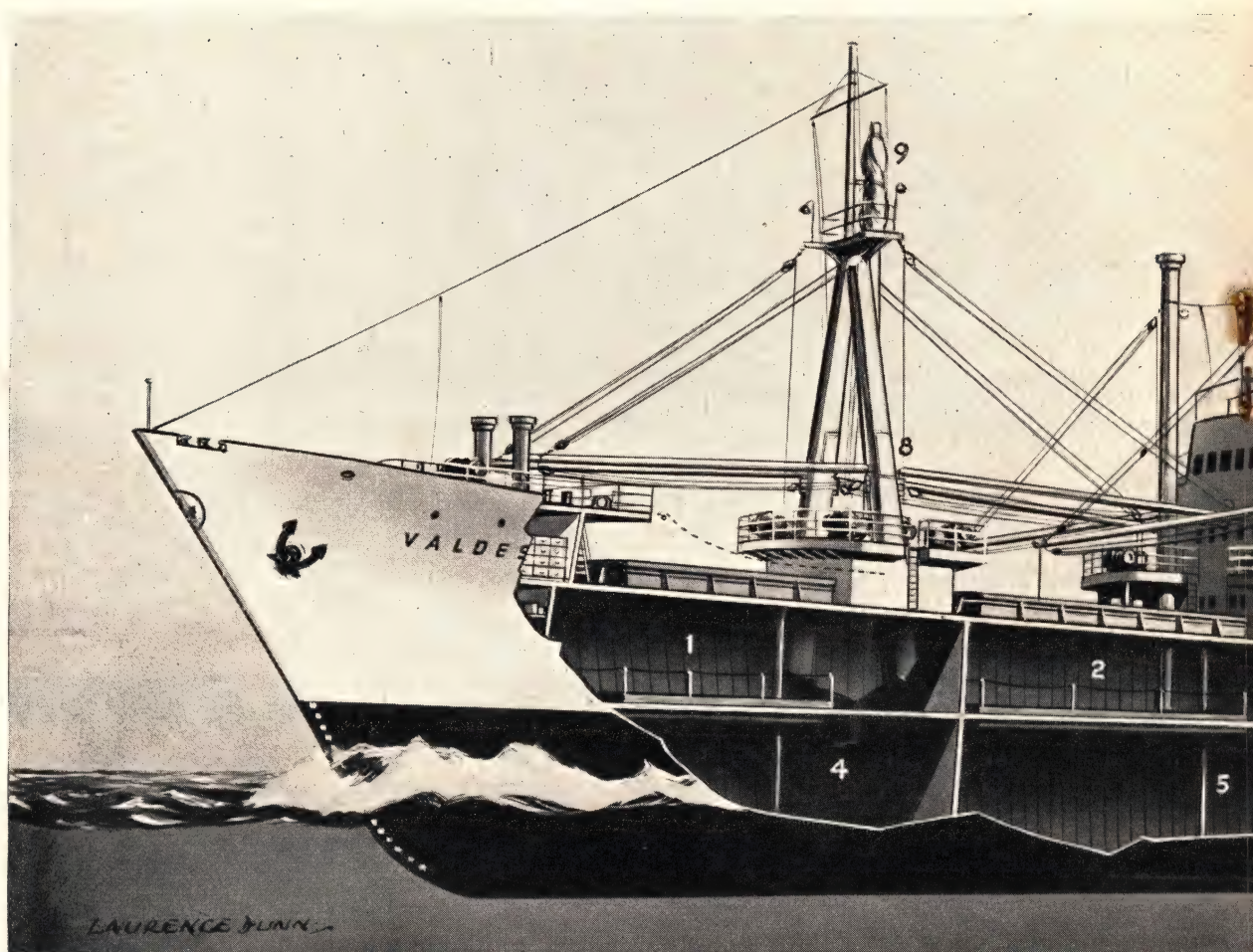
Each ship can carry up to 12 passengers and the whole of the bridge deck is devoted to their accommodation. Right forward there is a dining saloon, flanked to port by a smoke room and bar, and to starboard by a verandah. At the after end of this deck, beyond the engine casing, there is also a lounge. Stretching fore and aft, at the sides, are the passengers' cabins—four single and four double—each pair sharing a toilet and bathroom. Above, on the boat deck and abreast of the funnel, are the chief officer's and wireless operator's cabins (port side) and the captain's suite (to starboard). All but a few of the crew are berthed amidships, either on the shelter deck or the main deck. The propelling machinery consists of a pair of 10 cylinder M.A.N.-type 4-stroke engines developing a total of 1,900 b.h.p. These drive a single screw through Vulcan gearing.

How much the design of the short-seas fruit carrier has advanced during the last thirty years or so may



L DUNN

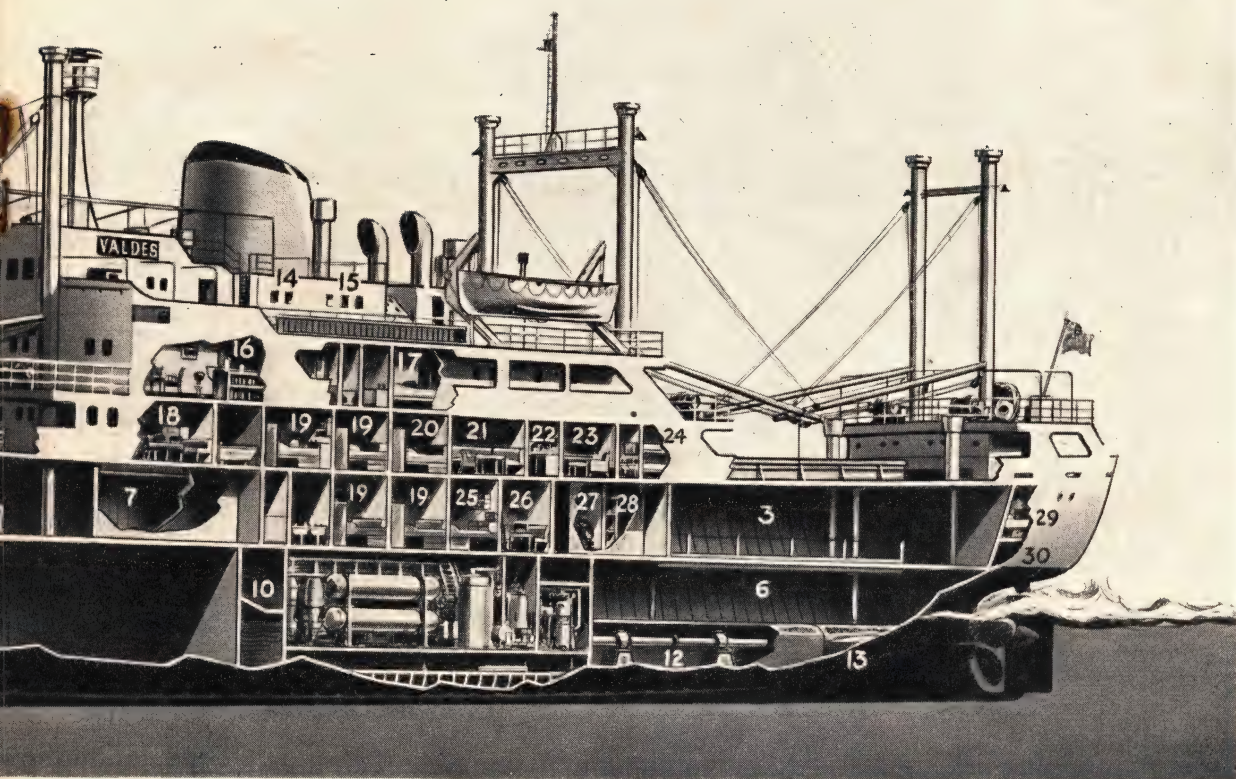
M.V. "Velazquez," 2,200 tons gross



KEY

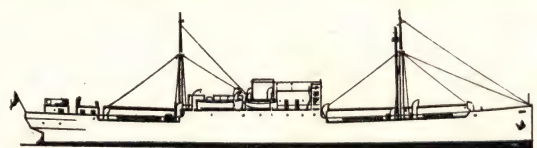
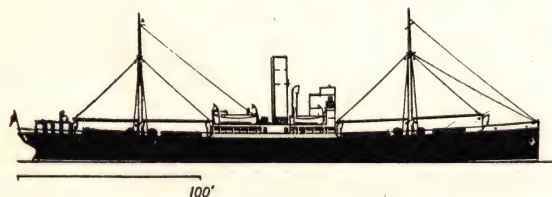
- | | |
|---|----------------------------|
| 1. No. One shelter 'tween deck | 16. Passengers' smoke room |
| 2. No. Two shelter 'tween deck | 17. Passengers' cabins |
| 3. No. Three shelter 'tween deck | 18. Smoke room |
| 4. No. One hold | 19. Stewards |
| 5. No. Two hold | 20. Chief electrician |
| 6. No. Three hold | 21. Crew's mess |
| 7. Refrigerated space | 22. Pantry |
| 8. Air inlets to bipod mast | 23. Cargo office |
| 9. Thirty-ton derrick | 24. Hospital |
| 10. Oil fuel | 25. Cook |
| 11. Engine room (auxiliaries in foreground) | 26. Stewards' mess |
| 12. Shaft tunnel | 27. Emergency diesel room |
| 13. Deep tank | 28. Stores |
| 14. Radio operator | 29. Seamen |
| 15. Chief officer | 30. After peak |

be gauged by the accompanying profiles of some earlier MacAndrews vessels. The first of these portrays the *Ravens Point*, the company's oldest unit and last steamer, which was one of a series of Grayson-built standard ships built 1918-21. Some of these were delivered to the company and others to the Liverpool firm of John Glynn & Co. Ltd., which was taken over by the MacAndrews Line a few years later. These ships had a d.w. tonnage of 3,000/3,100 and a speed of 10 knots. The next drawing represents a remarkably successful group of five motorships which were built in 1927 by Harland & Wolff. These, named *Pacheco*, *Palacio*, *Pelayo*, *Pinto* and *Ponzano*, were all 12-knotters of 2,200 tons d.w. The first two alone survived the war. The two larger and faster sisters *Palomares* and *Pozarica* were built by Doxford's in 1938. The deadweight capacity of these graceful looking ships was much the same—2,230 tons—but they had a speed of 15½ knots. Both ships saw strenuous war service with the Royal Navy, in the course of which the *Pozarica* was lost.



The *Velazquez* and *Valdes* are not the first post-war additions to the MacAndrews fleet, two others having been built by Doxfords in 1947, while others have been acquired second-hand. Nor are they quite the latest, for by the time this is in print they will have taken delivery of some smaller engines-aft ships, of a design very similar to that of the m.v. *Baltic Clipper* which was illustrated in the January issue of SHIPS & SHIP MODELS.

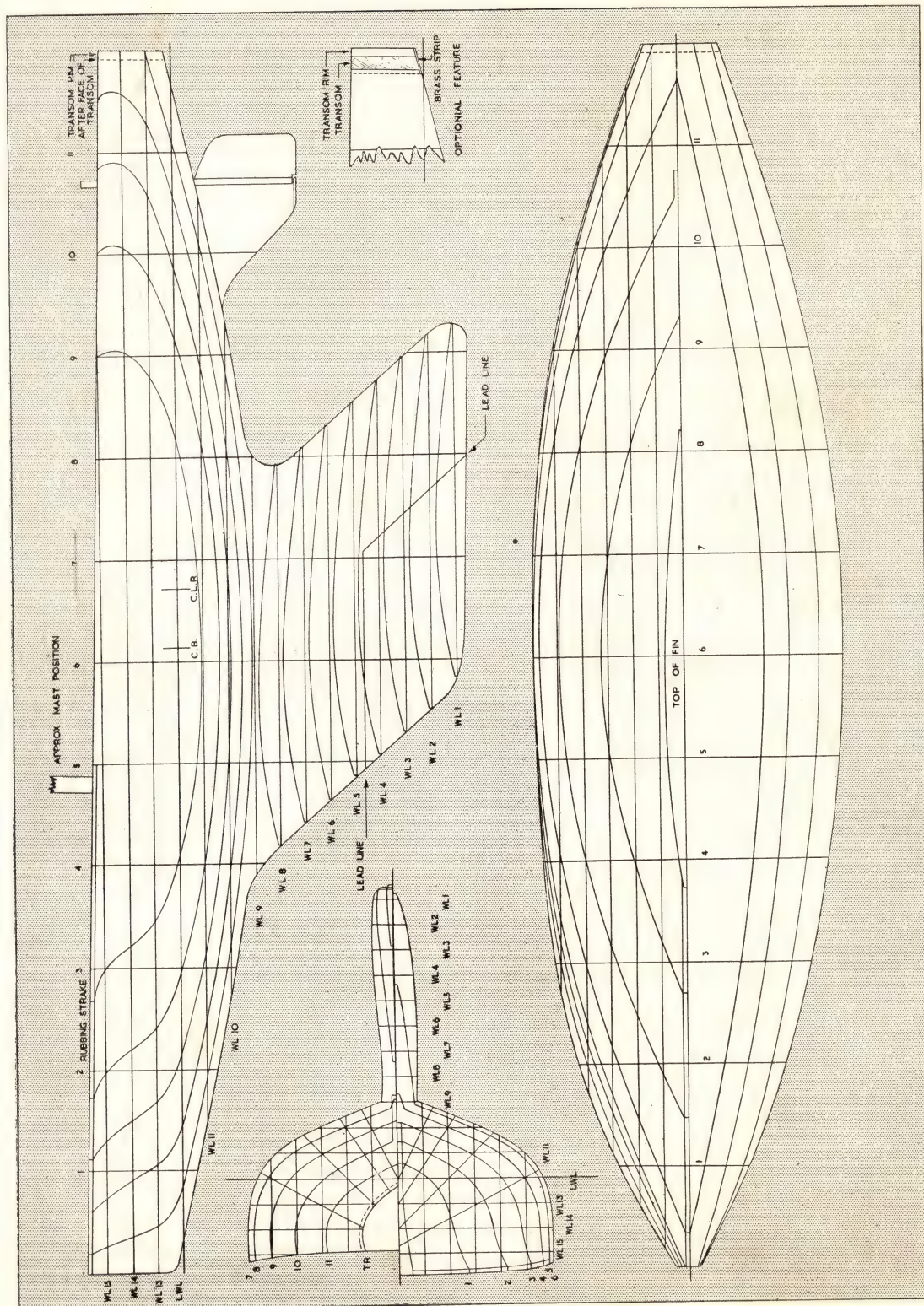
Below : S.S. "Ravens Point," 1,787 tons gross, length 265 ft., speed 10 knots



Above : M.V.s "Pacheco," "Palacio," "Pelayo," "Pinto" and "Ponzano," 1,346 tons gross, length 270 ft., speed 12 knots

Below : M.V.s "Palomares" and "Pczarica," 2,503 tons gross, length 295 ft., speed 15 knots





Hull lines of 36 in. "R" class "Waterbaby." L.O.A. 36.0 in.; L.W.L. 34.0 in.; Draught; 8.7 in. Depth. 11.0, Disp.: 11 1/2 lb. Full size print including Sail Plan will shortly be available

"Waterbaby"

a 36 in. Restricted Class Model

Designed and written by

H. B. TUCKER

UNDER the rules governing four of the five recognised classes of model racing yachts, two factors influence the success of a design. The first is, of course, the designer's technical skill, and the second his flair for selecting the type and dimensions which produce the fastest boat under the Class Rating in the weather conditions she will encounter. While the former is solely a matter of technical ability, the latter is more a matter of intelligent guesswork, guided by experience, and always liable to be upset by vagaries of the weather.

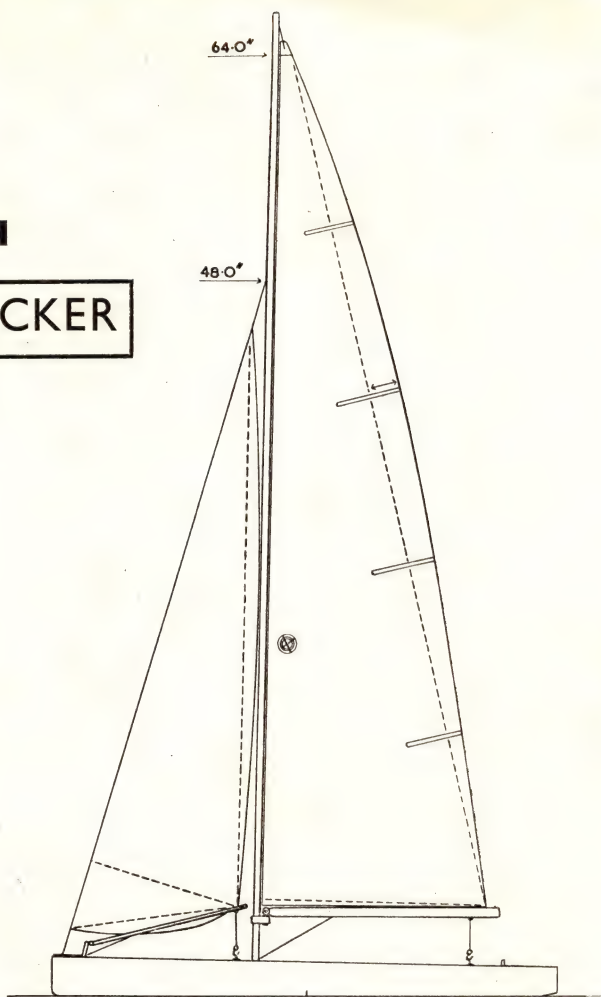
In this connection, there is one point which has never to my knowledge been stated openly. It is possible, though difficult, to produce a good all-round craft. Such a boat will put up a good show on all points of sailing and in all weights of wind, but she will always be prone to be beaten by the one-day boat. In fact, it would be nearer the truth if one said that she is certain to be beaten by the one-day boat, when the latter has weather to suit her. Thus the really good all-rounder will gain a greater number of flags during the season, but most of these will be seconds and thirds, since such a craft never encounters the conditions which render her invincible.

This applies to all classes except the 36 in., which is unique in that the rule automatically eliminates all question of dimensions, as the maximum dimensions of the hull are fixed as regards L.O.A., beam, depth and displacement, while S.A. is unlimited. Hence the designer must produce the largest, fastest and most powerful hull possible within the permitted limits, and the boat is a light-weather or heavy-weather boat according to the amount of canvas carried. In fact, under this rule there is no such thing as a one-day boat, and whether the yacht does well in light or heavy winds is almost entirely governed by the skipper's ability to match his canvas to the weight of wind.

As a result, this class is by far a stiffer test that any other of the actual technical ability of a designer. For this reason, I personally find the 36 in. class most interesting, and the lessons learned from it of the utmost value when designing other classes. I am aware that the protagonists of sail area classes, in which the S.A. is fixed and the hull unrestricted in any way, contend that such classes lead to advancement in hull design. This is, in my opinion, entirely erroneous, since any experienced designer knows that all that these classes can produce are animated knitting needles, slow for their great L.O.A., uninteresting and undesirable.

Since her C.G. (centre of gravity) always remains in the same position, the 36-in., like every other class of model yachts, is a pure displacement type, and in consequence good balance and the elimination of every possible cause of steering vices is essential. We have all heard the fallacy that one steering vice can be countered by the introduction of another working in the opposite direction, but even if it could be guaranteed that this balance between vices is maintained under all conditions, is it not better to eliminate all sources of trouble, and conserve all possible energy for the forward propulsion of our craft?

At this point, I will state that *Waterbaby* is very well



SAIL AREA

Jib	44.5 x 10.75	= 239
	2	
Mainsail	60.0 x 16.0	= 480
	2	
		719

SECOND SUIT

	luff	each	foot
Jib	40.0	36.5	12.0 in.
Mainsail	54.0	55.5	16.0 in.

SPINNAKER BOOM 15.0 in.

Spinnaker luff	... 46.5 in.
(Balloon) leads	... 48.0 in.
foot	... 32.0 in.

THIRD SUIT

	luff	each	foot
...	36.0	32.8	10.8 in.
...	48.6	49.9	14.4 in.

NOTE

Provide a second hanger on foreside of mast 43.25 in. above deck for jibstay of second suit.

balanced. In fact at an angle of 20 deg. heel, her C.B. (centre of buoyancy) moves a bare 0.07 in. aft, which is practically the equivalent of perfect balance. In addition, every known possible cause of steering vices has been eliminated.

It might be imagined by the layman that given a fixed set of dimensions (as under this rule), and using the same technique of balance and design, a designer's work must become stereotyped. In reality, there are so many *minutiae* in a yacht's lines, and differences in these have such marked effects, that often two designs, which appear to differ very little superficially, may yet behave very differently under sail.

In previous articles about boats to classes with a fixed L.O.A., I have repeatedly explained why such craft must

have their L.W.L. a small percentage shorter than the L.O.A., and a short overhang at each end is essential.

Considering the bow first, not only must the turn of the stem be just above water, but provision must be made in the design of the topsides for adequate reserve buoyancy, to prevent the boat digging her nose in, especially when running under a press of sail. I had this in mind when I invented the "Duck" bow in 1939, as well as giving the longest possible sailing lines. There are, however, alternative bows that will provide all the reserve buoyancy required; in fact it can be done with a quite ordinary rather full bow if this is carefully planned.

Yet another alternative is the flared bow, similar to that employed in *Waterbaby*. I am not the first designer to use this type of bow in a 36 in. model, as the late G. Howard Nash used it in a very pretty and successful little boat before the war. However, I do not think his example has been followed until now. The great advantage of the flared bow is that in addition to being a very efficient form of reserve buoyancy, it also keeps the boat very dry forward as all water is thrown aside rather than aboard. I have improved on this feature by combining it with a nipped-in after deckline. This is really a corollary to the flared bow, and in conjunction with it, should greatly enhance the yacht's dryness and cleanness through the water, with much benefit to her performance, particularly in rough water.

These two features should give the boat a smart and slightly unusual appearance, which I hope will please builders. Very often inexperienced designers, in their eagerness to make designs attractive and distinctive, sacrifice balance and other qualities that make the difference between a good yacht and a bad one, but I can assure readers that in *Waterbaby* nothing has been sacrificed for the sake of appearance.

Now let us return to the after end. In order to minimise back pressure, I have lifted the bottom of the transom clear of the water. In addition to this, I have also given as an optional feature "Tucker's Transom Rim." I included this device in my original "Duck" design as well as the round "Duck" bow. It has proved so successful that I have embodied it in all my recent designs to the 36 in. and M Class, also in a sharpie design to the French National 1 metre Class.

In connection with the flared bow, I draw attention to the fact that I have left a band $\frac{1}{8}$ in. thick at the top under the gunwale. Had the reverse curve under the flared bow been carried right up to the gunwale, it would have left a thin, frail edge, certain to be broken by even a slight collision. Instead the gunwale is left $\frac{1}{8}$ in. thick for the full length of the bow flare, thus providing a rubbing strake. This starts at the stem and fades out as the reverse curve of the flare does in the region of section 5. Now the rule provides for the use of a deck rail (or covering board) not more than $\frac{1}{8}$ in. thick. I recommend this also be used and set right up to the deck edge, so that the covering board forms a continuation of the rubbing strake, and thus in effect makes it $\frac{1}{8}$ in. thick, which should be ample provision against accidental damage.

On examination of the lines, it will be obvious that the easiest method to build *Waterbaby* is by bread-and-butter, either on the waterlines or buttocks. Although the latter effects a small economy in timber, I would recommend the novice to build on the waterlines, this being easier. The bow flare will make the boat a little difficult to plank so I do not recommend this method unless the builder has some experience. If the boat is being built multi-skinned or of plastic on the former, the former must be arranged to come in half on the midship section. This will permit the forward half to be withdrawn easily, and the after half can then be slid forward. Otherwise there may be considerable difficulty in withdrawing the former.

The waterline plan does not give quite a true picture of the amount of tumblehome used in the after sections to get the nipped-in deckline, since the outer line in this part of the boat is W.L. 14, which is not the line of greatest beam, which actually falls between W.L. 14 and the deckline on the body plan. Novices building *Waterbaby* by bread-and-butter on the waterlines are reminded that this must be allowed for in marking and cutting this layer.

I have designed the lead keel to cast a little overweight. This is highly desirable in view of variations in the purity of lead used for castings. It also gives scope for cleaning up the casting and a margin for the adjustment of fore-and-aft balance.

I have given a table of weights, and fixed the total weight of the yacht in full racing trim, including her largest suit of sails, spars, spinnaker and boom, vane gear and all other fittings, at 11 lb. 8 oz. This is $\frac{1}{2}$ lb. under the absolute maximum permitted by the rating rule. It will not make much difference if the 11 $\frac{1}{2}$ lb. is slightly exceeded, but it must on no account be more than 12 lb., or the yacht will not be in rating.

TABLE OF WEIGHTS

	lb.	oz.
Hull (inc. deadwood)	1	8
Deck (inc. beams and hatch)		10
Paint and varnish		12
Rig (inc. spinnaker and boom)		14
Vane steering gear		2
Other fittings and sundries		6
Trimming ballast		4
Lead keel	7	0
	11 lb.	8 oz.

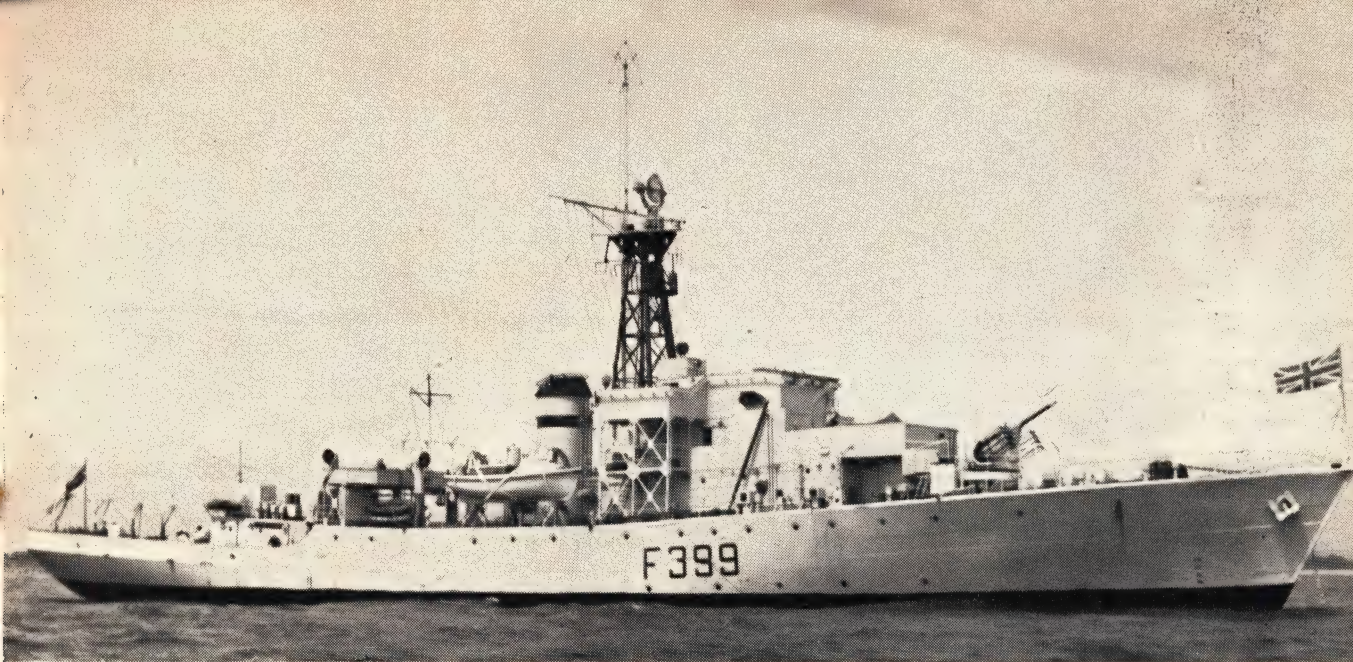
This model is designed for use with vane steering, and the profile will make her too sensitive for Braine gear. In order to get the utmost out of the rule, the deck is dead flat from gunwale to gunwale, being entirely without camber. For the same reason, the sheer is straight from stemhead to transom, and without rocker.

Since sail area is not limited, the boat can be given all the canvas she can use to advantage. I did not say "all she can carry," since there are many occasions when a boat can carry a big suit, but would travel faster and handle better with reduced sail.

With the type of hull employed, this boat should be very suitable for seaside lakes, and for most purposes her first suit will be very ample. It is, however, possible that on inland waters where very light winds are encountered, she could on occasion sport an even larger spread of canvas. In her second suit, it will be observed that I have kept the sails the same length on the foot as in her first. The advantage of this is that this lowers the aspect ratio, and the height of the C.E. (centre of effort), thus affording the required relief without losing too much sail area.

Because of the vane gear, a standing backstay will not be practicable, and I strongly recommend the use of runners with quick detachable fittings. The masts for the various suits of sails can be duralumin tube with a wooden topmast. Mainbooms can be flat section of wood. Jib-booms and spinnaker boom can also be duralumin tube. I recommend the use of a "Guy Blogg" pattern jib-boom with the first and second suits, but the third can have the usual model yacht type.

Waterbaby should prove stiff and carry her sail well. As I mentioned early in this article, there is no such thing under this rule as a good light-weather or good heavy-weather boat, since this is entirely governed by the skipper's ability to match his canvas to the weight of the wind. Given the right sail for the weather, *Waterbaby* should not be an easy boat to beat.



H.M.S. "Tintagel Castle," one of the "Castle" class frigates which may be scrapped

Naval Photograph Club

BY P. A. VICARY

BRITAIN'S Reserve Fleet, which includes some 350 warships is likely to be substantially reduced in the near future, in accordance with the Navy's plans to meet new conditions at sea. The reduction will be a gradual and steady process for the purpose of "streamlining the Fleet." Among the ships of the Reserve Fleet which are likely to be scrapped are the frigates of the "Loch" and "Bay" classes of 1,500 tons with a speed of 19.5 knots; fifteen ships of the "Black Swan" class of 1,470 tons, speed 19.75 knots; thirty ships of the "Hunt" class of 900 to 1,000 tons with a speed of under 30 knots; twenty-four "Castle" class frigates (ex corvettes) of 1,000 tons, 16.5 knots. It is the intention of the Admiralty to have all anti-submarine and anti-aircraft frigates as well as cruisers, destroyers and aircraft carriers, with a speed of 30 knots or more. The only vessels with a lower speed will be the minesweepers.

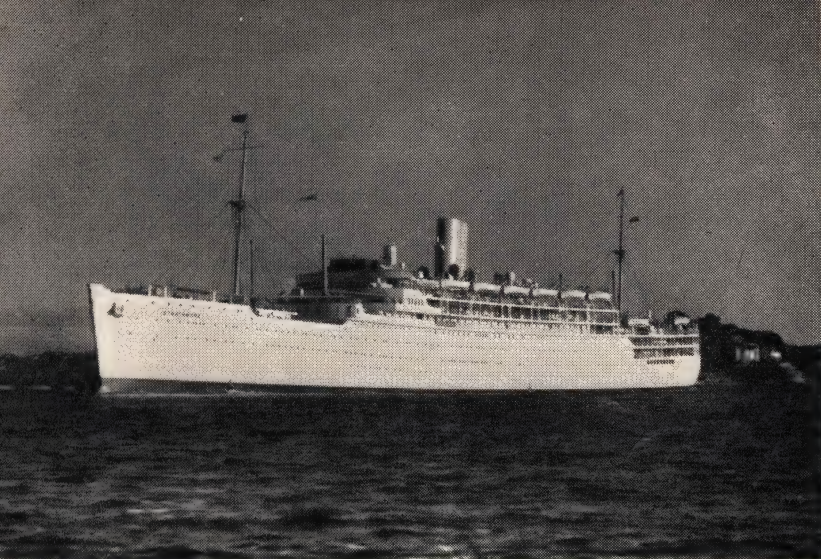
Nothing positive has been made known so far about the handing over of the naval base at Simonstown. In July, 1954, it was stated that a demand to Britain "to hand over the naval base" was made by South Africa. Mr. Erasmus, the South African Defence Minister, came to London to discuss the matter, which resulted in an Admiralty mission being sent out to South Africa for conference, and to report to the two governments on various matters concerning naval co-operation. It was reported locally in South Africa that Mr. Jarrett, Deputy Secretary to the Admiralty, who led the mission, had come to discuss matters of detail, and that the transfer of the base had already been completed. On the other hand the Admiralty has announced that they cannot "make any statement regarding the future of the naval base" at Simonstown. Surely it will be wise to think again before giving up such a valuable base, with its dockyard, especially now that we have more or less lost control of the Suez Canal. It points at once to Simonstown with Aden, that they may play a very large part in any future war, as we should need dockyard facilities for our warships on the long run to the Far East, especially if the Suez

Canal became untenable, which in all probability it would. Let us hope that the Admiralty will stand firm on this point, especially as by an Act of 1922 we were given "a right of user of Simonstown in perpetuity."

H.M.S. *Sheffield* has gone to the Mediterranean as flagship of the C-in-C, Admiral Sir Guy Grantham, after completing her refit at Portsmouth. H.M. Frigate *Wren* has returned home after eight years foreign service. She was launched in 1942 by the Director of W.R.N.S., Mrs. V. L. Mathews. When the *Wren* berthed at Portsmouth, Dame Vera Langton Mathews was on the jetty to welcome the ship home. During 1943 to 1945, she was one of the late Captain F. J. Walker's Second Escort Group, with H.M.S. *Sterling* as S.N.O., *Magpie*, *Wild Goose* and *Woodpecker* (sunk). *Wren* claimed three "U" boats on her own account and two more in collaboration with other ships of the Group.

The fourth destroyer squadron has commissioned at Malta; the ships are *Agincourt*, *Aisne*, *Corunna* and *Barrosa*. H.M.S. *Ark Royal*, after completing canting trials in Gladstone Dock, Liverpool, bumped against the dock while undocking but caused no damage.

H.M.S. *Mull of Galloway*, flying the Broad Pennant of Commodore J. Lee-Barber, led the 104th and 232nd Minesweeping Squadrons on a minesweeping demonstration visit to Denmark and Norway. H.M.S. *Bigbury Bay*, frigate, has been escorting the Royal Yacht *Britannia* during Princess Margaret's visit to the West Indies. The frigate *Sparrow* is home after two and a half years in the Far East. H.M.S. *Hardy*, new frigate, has joined the 3rd Frigate Squadron. The inshore minesweeper *Petersham* has been put afloat from the yard of Hugh McClean & Sons, Gourcock. The wartime monitor *Abercrombie* has gone to Barrow to be broken up. The United States submarine *Nautilus*, which is atom powered, has carried out successful trials at sea. It is claimed that she can cross the Atlantic at full speed and go round the world without refuelling.



Left: S.S. "Strathmore," 23,580 tons has a taller fo'c'sle than the earlier pair Strathaird and Strathnaver

Heading p. 133: S.S. "Iberia," the P. & O. Line's latest passenger ship in contrast to other post war liners the large illuminated name is placed well aft of funnel

No. 16. THE P. & O. LINE

THE P. & O. Line, to use its familiar title, stands out as one of the giants of the British shipping industry for, besides owning a fleet of over 30 passenger and cargo liners, it also either controls or has an interest in many other concerns, of which the following more readily come to mind: British India Line, Orient, New Zealand, Federal, Strick, Hain, Nourse, Union Steamship, Eastern & Australian, Australasian United, Moss-Hutchison and the General Steam Navigation Co. In size its own passenger fleet far surpasses that of any other company trading to the East, comprising eleven ships ranging from 14,000 to 29,000 tons gross.

As is well known, the whole fleet formerly had black funnels, black hulls with white ribbon, and stone coloured upperworks. During the late 'thirties the colour of the superstructure was changed to a lighter shade and on the passenger ships was carried lower down to include the sides of the islands. It was the *Strathnaver*, which came out in 1931, that introduced the present white and yellow colour scheme. At first this was reserved for the "Strath" ships, but after the war it was extended to include all but the older passenger units. Since the scrapping of the *Mooltan* and *Maloja* the darker colours have been reserved for the P. & O. cargo ships (these were described in the December issue of SHIPS AND SHIP MODELS).

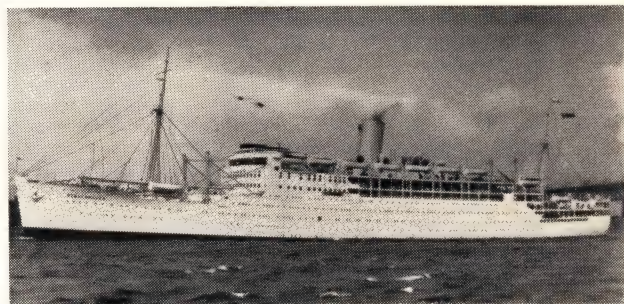
The passenger fleet is composed of two distinct groups, those employed on the Australian run and those which trade to the Far East. The itinerary for the Australian ships is: London, Port Said, Aden, Bombay, Colombo, Fremantle, Adelaide, Melbourne and Sydney; the calls at Bombay and Adelaide sometimes being omitted. Two of the ships—the *Stratheden* and *Strathmore*—usually continue one stage further, making Brisbane their Eastern terminal. At certain times, too, an extra call may be made, as for example by the *Arcadia* and *Stratheden*, which after sailing from London in April will make brief stops at Navarino Bay.

The Far Eastern ships operate between London and Hong Kong, making intermediate calls at Port Said, Aden, Bombay, Colombo, Penang and Singapore. The *Chusan*, alone, on occasion continues to Yokohama and Kobe. During the summer months (June-Oct.) the company's three latest ships, the *Arcadia*, *Chusan* and *Iberia* will be engaged on cruising. One of these trips will include Port Said, the furthest point yet touched on any post-war

P. & O. cruise. Cruises, however, are not confined to the European end of their route and on May 12th the *Himalaya* is due to sail from Sydney to Suva, Noumea, Port Moresby and back.

Turning to the ships themselves, the Australian fleet consists of the following:—

Ship	Built	Year	Tons gross
Strathnaver	1931	22,270	tons gross
Strathaird	1932	22,568	" "
Strathmore	1935	23,580	" "
Stratheden	1937	23,732	" "
Himalaya	1949	27,955	" "
Arcadia	1953	29,734	" "
Iberia	1954	29,613	" "



S.S. "Strathnaver," 22,270 tons was the first of the Strath class. Originally she and her sister Strathaird carried two dummy funnels

The first five were all built by Vickers-Armstrongs Ltd. at Barrow, while the last two came from John Brown and Harland & Wolff respectively. The *Strathnaver* and *Strathaird* are sisters and started life as three funnelled ships. Then the largest and fastest in the fleet, they followed the fashion of the *Viceroy of India* in being fitted with turbo-electric machinery, this giving them a speed of 19½ knots. Originally they carried first and tourist class passengers, but have lately been converted to one-class ships, carrying 1,253 and 1,252 respectively. It is sometimes forgotten that all these ships are also large cargo carriers. Each of the "Straths" has six holds, three forward and three aft. These first two have a deadweight

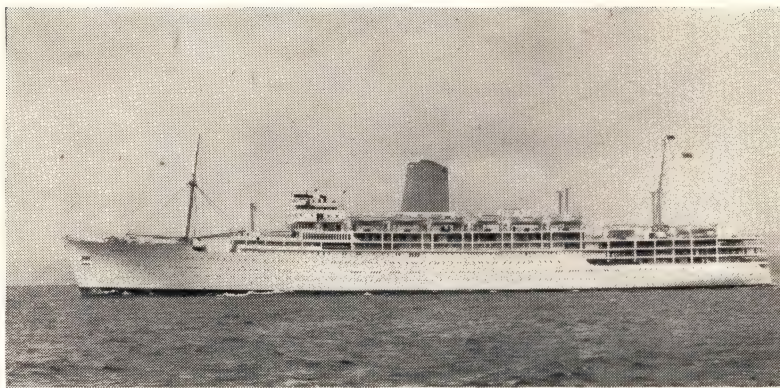


BY LAURENCE DUNN

capacity of 8,000 tons a figure increased to 11,000 in the later pair. The *Strathnaver* and *Strathaird* measure 664 ft. in length overall, by 80 ft. beam. In the later "Straths" the length remained virtually the same but the breadth was increased by 2 ft. and the depth by 1 ft. While the general design remained much the same the hull forward was made one deck higher and the bridge deck extended right aft. A change was also made to geared turbine machinery, and this has been the rule for all subsequent passenger ships. Further external differences between the *Strathmore* and *Stratheden* may be seen in the latter's thicker and more widely spaced stanchions, taller funnel and less abrupt ending to the after part of her superstructure due to the swimming pool—set between the after kingposts—being restored to its original level. In the newer ship, also, there is an extra deck aft, the stern hull plating finishing one deck lower. The *Stratheden* is probably the only P. & O. passenger liner to have made peacetime visits to New York. This was in the summer of 1950, when she made several transatlantic trips for the Cunard White Star Line, as it was then called.

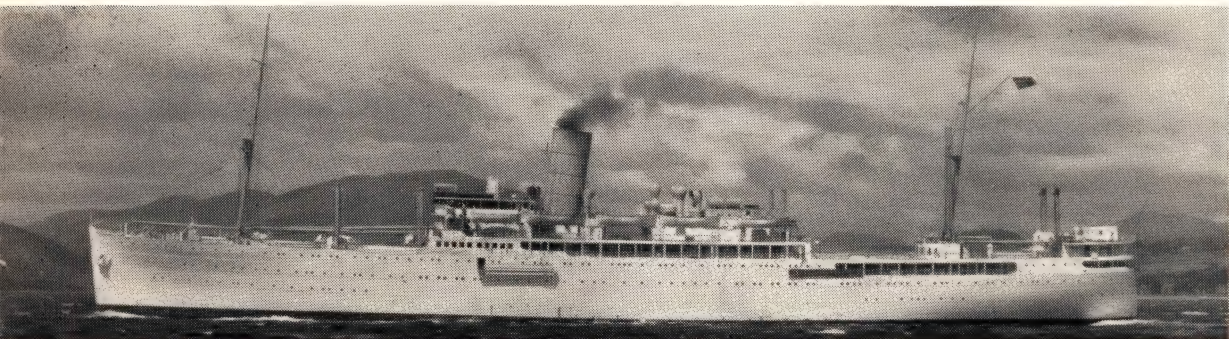
The first of their post-war liners, the *Himalaya* struck a new note in being given only one mast. Ordered in January, 1946, she entered service in October, 1949. Differing materially from the rather earlier *Orcades* and the *Oronsay*, she is nevertheless similar as regards dimensions and basic hull shape. The *Himalaya* was then the

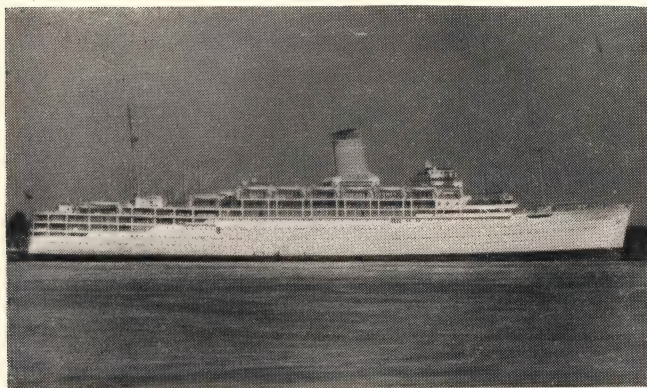
S.S. "Carthage," 14,283 tons and her sister *Corfu* are the smallest of the P. & O. Line's passenger fleet. Prior to wartime reconstruction they had two shorter funnels and a short well deck forward between the foremast and foreward kingposts



largest and fastest ship in the P. & O. fleet and attained a mean speed of 25.13 knots on trial. Her service speed was 22½ knots and this enabled her to reduce her passage time to Australia by 10 days, making Melbourne in 28 days. She measures 709 ft. in length o.a., has a breadth of 90 ft. 6 in., and caters for first and tourist class passengers, the present figures being 760 and 401 respectively. The accommodation is mechanically ventilated, and on deck all the necessary air intakes are grouped together in the lofty funnel base. The *Himalaya*, like the *Chusan*, has a greater space between the bridge and funnel than found on the "Straths," and this has permitted the development of a new and sheltered deck area, protected fore and aft by these structures and at the sides by screens. This feature has been repeated in the later ships. The propelling machinery consists of two three-stage sets of Parsons geared turbines which develop a normal s.h.p. of 34,000. They take steam at 525 p.s.i. and 850 deg. F. from four watertube boilers. An important change to the funnel was made in 1953 when a Thornycroft top was fitted.

In the *Arcadia* and *Iberia*, which entered service in February and September of 1954 respectively, the same general design has been followed, although the overall length has been increased to 718 ft. 9 in. Products of different shipyards, the two differ slightly in external appearance, not only in the shape of funnel and hances, but also in the position of the large illuminated name which in the *Iberia* is placed further aft. Their passenger accommodation is particularly attractive, while a new and notable addition is the observation lounge, placed forward just under the bridge. Large windows on three sides give a clear view forward and to port and starboard. Here, too, besides a bar, are compass, chronometer and chart, so





S.S. "Chusan," 24,215 tons the largest craft on the company's Far Eastern Service

that passengers may study the ship's course. These two vessels carry a larger proportion of tourist class passengers than the *Himalaya*, the figures being 679 (*Iberia* 674) first and 735 (733) tourist. Like the other ships they have six holds and these are capable of taking about 12,000 tons of cargo. The turbines are of double-reduction geared type and are designed to develop the same power and speed as the *Himalaya*, namely 34,000 s.h.p. normal and 22½ knots in service. Both ships are fitted with Denny-Brown stabilisers.

INDIAN SERVICE

The four passenger ships employed on this route are the :

		Built	1931	14,280 tons gross
Corfu	1931	14,283 "
Carthage	1938	16,033 "
Canton	1950	24,215 "
Chusan		

The *Corfu* and *Carthage* are sisterships and were built by Alexander Stephen & Sons Ltd. They measure 543 ft. in length overall by 71 ft. breadth and are fitted with S.R. geared turbines and four watertube boilers, which give a service speed of 17 knots. Each has six holds with a total cargo capacity of about 350,000 cu. ft. bale, part of which is insulated. As built they had accommodation for 177 first and 200 second class passengers, but now cater for 183 first and 213 in the tourist class. Designed on very similar lines to an earlier trio, the *Cathay*, *Comorin* and *Chitral*—all built in 1925—they originally had two squat (black painted) funnels, the tops of which were level with the crosstrees. The after funnel—a dummy—was removed during the war, while at the same time a short

well-deck, which extended from foremast to forward kingposts, was enclosed to provide extra crew accommodation. These alterations, plus the addition of an upper poop house and the change of colour scheme have completely changed the appearance of these ships. They, like the more recent *Canton*, which came from the same shipyard, served during the war both as armed merchant cruisers and as transports.

The *Canton*, which entered service in October, 1938, was the last P. & O. passenger ship to be completed with a black-painted hull, and of their Far Eastern mail ships was the first for very many years to be given only one funnel. Her design in many ways marked a break away from previous P. & O. practice and in profile she rather resembles a small scale "Strath." A particularly graceful looking ship, she has many distinctive points which permit easy identification at a distance; the placing of her masts very near the extremities of the hull, the tall funnel yet low crosstrees, the lofty set of her forward kingpost derricks and finally the very pronounced sheer given to the upper edge of her red boot-topping.

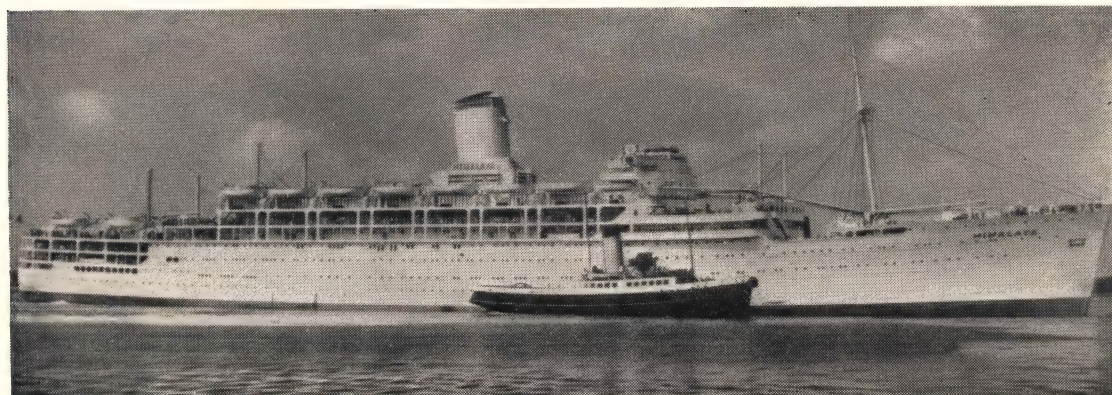
Slightly larger and faster than the "Corfu" class, she measures 563 ft. in length overall by 73 ft. beam, and has geared turbines which give her a service speed of 18 knots. She has accommodation for 302 first and 244 tourist class passengers, while in her holds she has room for 365,148 cu. ft. of cargo, about one-tenth of it insulated.

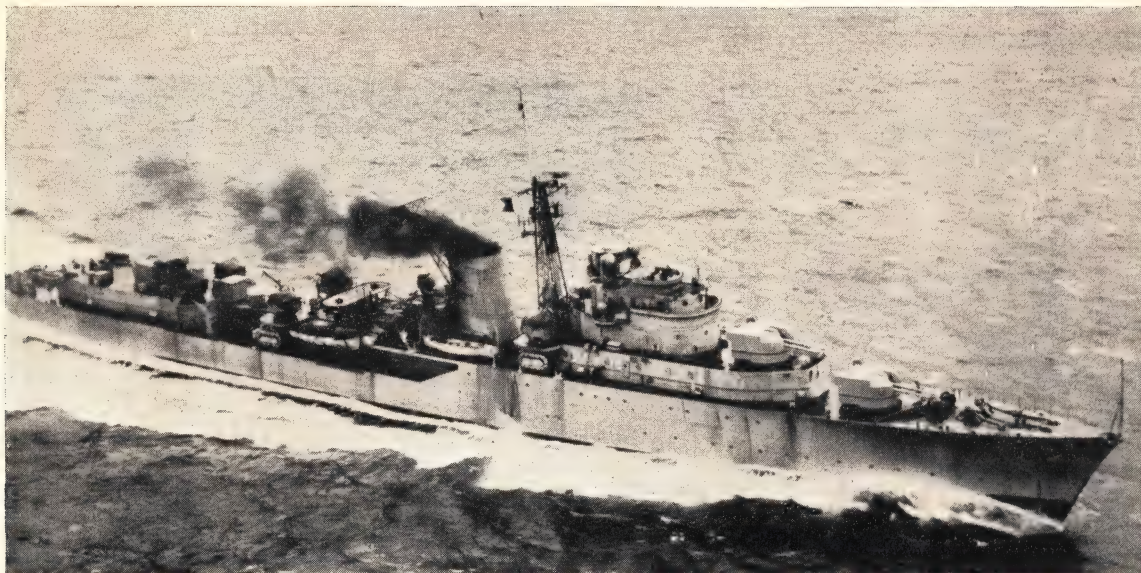
The *Chusan*, largest of the Far Eastern fleet, was the company's second post-war passenger ship, and ran trials in June, 1950. After making a series of cruises she took up service in the autumn. Her initial Eastern trip was deliberately a shortened one, terminating at Bombay, and it was not until November of that year that she left London on her first full-length trip to Hong Kong.

She, like the majority of the fleet, was built by Vickers-Armstrong Ltd. at Barrow. Not dissimilar to the "Straths" as regards size, she has an overall length of 672 ft. 6 in. and a breadth of 85 ft. Geared turbines of 42,500 s.h.p. give her a service speed of 21½ knots. Accommodation is provided for 484 first and 549 tourist class passengers and is of a very high standard. As regards cargo, she has a capacity of 437,040 cu. ft. bale. The *Chusan* was notable in being the first large liner to be built with Denny-Brown stabilisers. Another innovation for so large a ship was the fitting in 1952 of a Thornycroft funnel top. This device proved so successful that it was repeated on the *Himalaya*.

Besides this impressive fleet of passenger liners, the P. & O. Line also manages the one large troopship for the Government. This is the *Empire Fowey* (ex *Potsdam*), a ship of 19,121 tons built in 1935 for the North German Lloyd.

S.S. "Himalaya," 27,955 tons, she is the only single master in the passenger fleet





From BARROW to the CARIBBEAN

BY DESMOND WETTERN

TWO important new units for the Venezuelan Navy have recently been on trials and have now sailed for their home ports. These ships are the large destroyers *Nueva Esparta* and *Zulia*. They have been built by Vickers-Armstrong at Barrow.

Their design is based on that of the "Daring" class but in appearance they are like ships of the earlier type of "Battle" class but with a longer forecastle deck. They mount six 4.5 in. dual-purpose guns and sixteen 40 mm. A.A. They also carry three 21 in. torpedo tubes. The guns are mounted in a conventional pattern with two turrets forward and one aft.

A noticeable feature is the complete absence of any unsightly stump masts. The large heavily raked funnel does duty as a main mast.

The bridge-work is completely enclosed and is streamlined. Permanent frameworks to carry awnings are fitted.

Internally these are most interesting ships. They are of course equipped for serving in extreme heat and are air-conditioned throughout. Fans and ice-water machines are very prominent. The living spaces are large and well designed without the usual dirt-catching corners.

Flats and passages are very wide which is a most noticeable feature since most small ships are very cramped and have no open spaces. Much of the lighting is of the fluorescent type including that in the mess decks.

Turning however to the more important factor of fighting qualities, the general impression is that these ships are extremely comprehensive and leave little to be desired.

There are two engine rooms and two boiler rooms, though the uptakes are trunked. There are two complete electrical systems and both operate quite independently. One can supply power to the

whole ship should the other be put out of action.

All the usual navigational aids are carried including echo sounders and asdic. The radar equipment appears to be of the standard type.

The 4.5s are partly automatic. All guns are radar controlled. The A.A. guns are of the twin 40 mm. type. The minimum of space is taken up by the 4.5 machinery.

The only anti-submarine equipment carried is a few depth-charges and two depth-charge racks aft. Evidently these ships are designed entirely for surface operations, making full use of the radar controlled guns. The torpedo armament seems small compared with that mounted in the latest type of British destroyers.

The *Nueva Esparta* and *Zulia* are not merely replacements for existing ships but together with their less advanced sister ship, the *Aragua*, they are part of a long-term and considerable building programme. Some six ships of a light-destroyer frigate variety have been ordered from an Italian yard. Three more are projected.

In view of the present trend in naval warfare to turn more and more to submarine and mine counter-measures, the Venezuelan Government has taken a courageous decision by building fleet destroyers in the truest sense. Only time will show whether such a decision was justified.

Such an article cannot be concluded without a word about the personnel of the Venezuelan Navy. The ships are kept extremely clean, and ashore in Portsmouth the liberty men were very cleanly and neatly turned out. Their general behaviour was excellent. As one dockyard matie remarked: "They're a quiet crowd—keep themselves to themselves—and make no trouble."

The writer is indebted to the Venezuelan Naval Attache for his information and advice.

Modelling a... 50 GUN SHIP

On the establishment proposed in 1733

Final Instalment

By R. J. COLLINS

LATEEN yard. As described under yards, there is an eye bolt at the heel and a smaller one at the peak. To the peak is attached a small block used for signal halyards (which is belayed to eye bolt at end of starboard rail). Four feet down is attached a pair of pendants of which more anon. The remaining length is divided into six more or less equal parts, to each of five divisions is attached a pair of blocks with a sixth pair at the end. Counting from the heel the first pair (12 in.) is attached to the eye bolt, a 2 in. rope made off to itself on each block runs down and forward to a 12 in. block lashed to the seventh main shroud one on each side and is belayed to the rail beneath. Each of the second pair of 12 in. blocks on the lateen yard has a brail running down to a block on the eighth main shroud one on each side and so to the rail. Fig. 167. The third pair have similar brails but they pass down one on each side to a block on first mizzen shroud and so to the rail. The fourth pair are aft of the jeer block, and are 10 in. with 1½ in. brails. Each brail is made off to itself

on the bowsprit fairlead to middle timber head on rail. Fig. 170.

Main topgallant staysail halyard. 8 in. block lashed to port side of masthead. 1½ in. rope made fast to back of fore topstay, through bullseye about 10 ft. from main masthead, through block at masthead and straight down through lubber hole to rail on port side. Fig. 171.

Main topmast staysail halyard. 9 in. block beneath trees on starboard side. 1½ in. rope made fast to back of forestay, up to block on mainmast and down through hole in top to starboard rail. Fig. 172.

Mizzen topmast staysail halyard. 8 in. block at top masthead just below stay. 1½ in. rope made fast to back of main stay, up through block and down via hole in top to starboard cleat on mast. Fig. 173.

LIFTING TACKLES, ETC.

Yard tackles. From the arms of the fore and main yards are suspended lifting tackles, used for getting out the

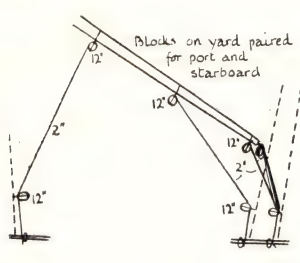


Fig. 167. Brails in forward end of lateen yard

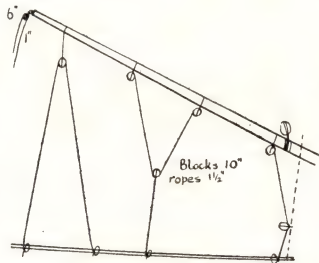


Fig. 168. Brails and vangs in after end of lateen yard

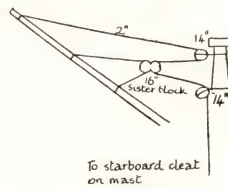


Fig. 169. Lift for lateen yard

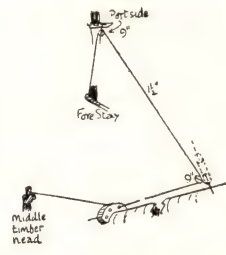


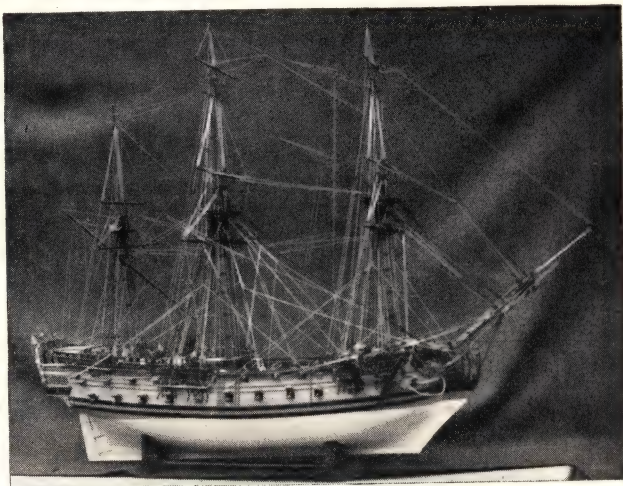
Fig. 170. Fore staysail halyard

and passes down and forward to 10 in. block on last mizzen shroud and so to the rail. Pairs five and six are linked together by a long 1½ in. brail each end being made off to itself around the blocks. In the middle of this rope is a 10 in. block, the pendant from which passes straight down to the rail. The end position is taken by the pair of pendants already mentioned, with 10 in. blocks. These are for the vangs, the standing ends of which are secured to an eyebolt, the others being belayed to the rail. Fig. 168.

The lateen lift is of 2½ in. rope. Standing end near peak of yard, forward through 14 in. block stropped to mizzen masthead just below cap, then aft to 16 in. sister block, forward to 14 in. block at base of masthead and down through the lubber hole to cleat on starboard side of the mast. The other half of the sister block has a 2 in. bridle both ends of which are secured to the yard. Fig. 169.

Fore staysail halyard. 9 in. block right up beneath topmast crossrees on port side, 9 in. block stropped to base of fore topmast preventer stay. 1½ in. rope made fast to back of fore stay, up through the block beneath the trees, down to block on bowsprit and inboard via the top (port) hole

(Continued from March issue page 101)



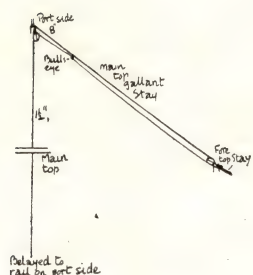
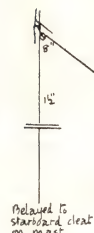


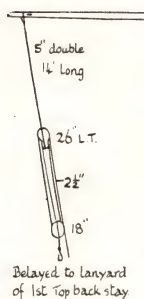
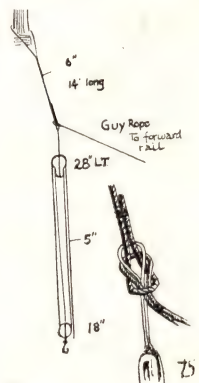
Fig. 171. Main t'gallant staysail halyard



172. Main topmast staysail halyard

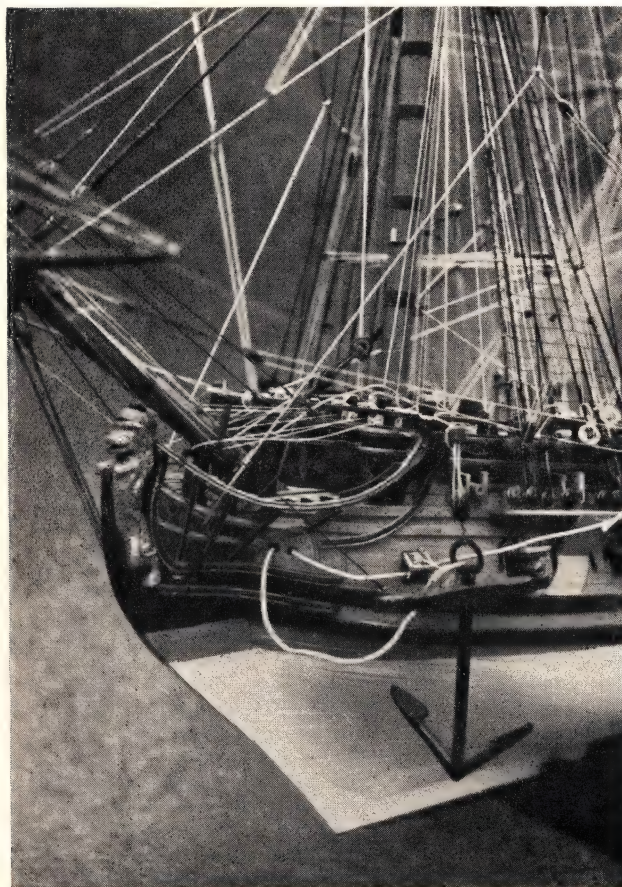


173. Mizzen topmast staysail halyard

174. Tard tackles
175 (right). Winding tackle

boats, etc. They consist of a 26 in. long tackle suspended on a double pendant of 5 in. rope by about 14 ft. long. Through this is rove a $2\frac{1}{2}$ in. runner with an 18 in. single block (with a hook) which is drawn down and the whole belayed to the lanyards of the foremost topmast backstay. Fig. 174. Garnet falls are a similar type of tackle but slung from the main yard only and from a position near the clew garnets. Sizes the same as the yard tackles. On the model a sling is attached to the hook and rests loosely over the main deck after cleat.

Port bow of completed model



Winding tackle is slung from the mainmast head, over the stay, etc. 6 in. pendant about 14 ft. long, 28 in. long tackle, runners 5 in. with 18 in. block. Attached to the head of the 18 in. block is a 5 in. guy rope which is belayed to foc's'le forward rail slightly starboard of mainmast. Fig. 175.

That completes the rigging but leaves as oddments the tackle for catting the anchor, a 24 in. double block paired with the sheaves in the cat-head and bearing a similar size hook, the ropes are $3\frac{1}{2}$ in., Fig. 176; a short 6 in. rope for stowing the anchor; a rope and chain for ditto; a 24 in. single block slung at the head of the davit, rove through this is a $6\frac{1}{2}$ in. rope with a large hook one end and the other end with a 26 in. long tackle with $3\frac{1}{2}$ in. falls to an 18 in. single block nooked to an eye bolt on the deck.

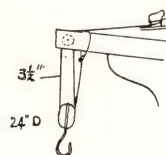
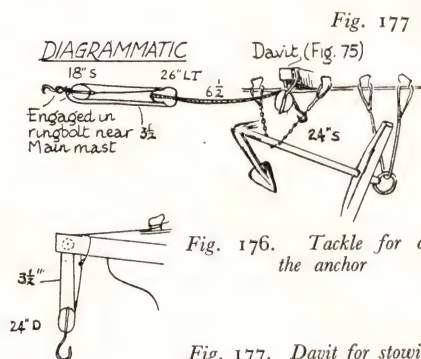


Fig. 176. Tackle for catting the anchor

Fig. 177. Davit for stowing the anchor

Cat tackle

Fig. 176

This concludes the instructions for building the model. They are based throughout on the author's work in building his own model. In fact, this is the second model of this ship he has built, so that these instructions have had a double check and the methods advocated have been tried out very thoroughly. The model is not too large for the ordinary house, and yet is large enough to enable the inclusion of a wealth of interesting detail. The ship at this period had lost much of the gilded decoration of its predecessors, but still retained sufficient to give the impression of richness. Also, as a ship she had become more sea-worthy and graceful in having lost the high poop. The 100 gun ship was of necessity high-sided and rather clumsy in appearance, whereas the 50 gun ship gave a much better impression of grace and speed.

RADIO CONTROL NOTES

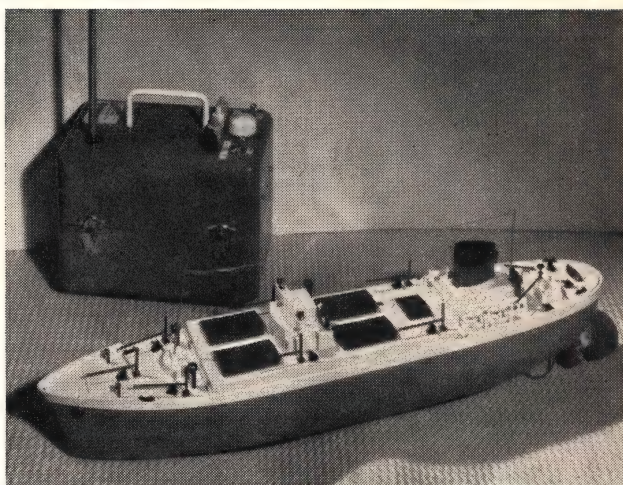
A series of articles for the modeller with an interest in remote control of his craft

By G. SOMMERHOFF

TRI-ANG RADIO CONTROL

SINCE my last article was written an event has taken place which is bound to be of great interest to ship lovers and modellers.

At the Brighton Toy Fair the makers of Tri-ang toys, Messrs. Lines Bros. Ltd., gave the first public demonstration of the complete radio controlled model ship, transmitters and self-contained ship control



units which they are planning to put on the market this coming May. In many respects these radio control units are an entirely new departure from the past.

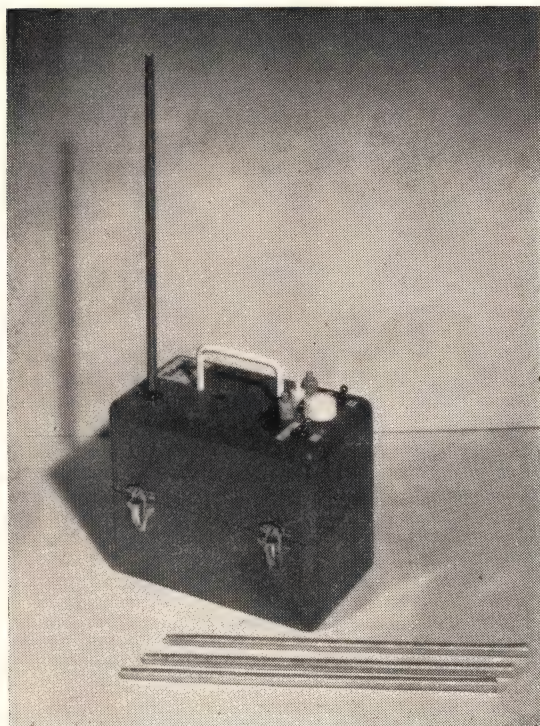
M.S. "BRITISH ADVENTURER"

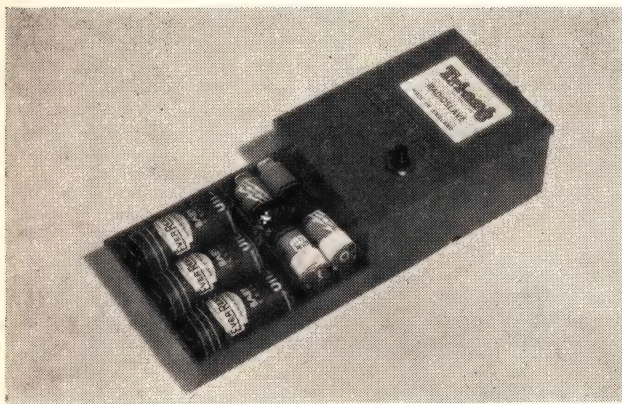
Their ship, the *British Adventurer* is a plastic cargo boat, 20 in. in length, with pleasing lines, colours and deck fittings. But its not a scale model of any existing ship. Both the rudder and the engine are controlled by radio. The rudder has three positions and is sequence controlled. The engine has a continuously variable forward speed, but can also by radio be made to stop or to go astern. It is powered by a Frog "Tornado" motor running off 3 volts. This motor, together with the radio, intergear and battery compartment is housed in a self-contained unit which is easily removed.

THE "RADIOMASTER" TRANSMITTER

The transmitter is housed in an attractive red metal case from which protrude the speed control knob and several coloured control buttons. It has a built-in wavemeter which enables it to be tuned to the correct wavelength by the simple process of pressing a button and turning a trimming screw until a little light behind a window glows at its brightest. This wavemeter was provided largely in order to satisfy the new G.P.O. regulations which make the possession of a frequency checking device compulsory.

In addition to a plain unmodulated carrier wave the transmitter can emit a pulsed signal with variable mark/space ratio and two alternative pulse frequencies. The interesting feature of this pulsing system is that the pulse modulation is achieved entirely electronically—that is to say, without the aid of pulse drums or relays. A disadvantage of this system, however, is that the mark/space ratio cannot be varied evenly over the whole possible range. It can be varied with accuracy only from a ratio of about 1.2 : 1 down to almost zero. In consequence the forward speed only of the boat is continuously variable by radio : for the control system used in the boat is such that in the absence of a transmitter signal





The radioslave unit

the engine runs forward and with a signal it runs astern. The boat is stopped therefore by sending a pulsed signal with a 1 : 1 mark/space ratio. The forward speed is varied by varying the ratio below this value.

An entirely novel method of steering is used. The rudder is moved by a mechanism which is actuated simply by reversing the propeller for something like one second. This short reversal has no noticeable effect on the forward motion of the boat.

THE "RADIOSLAVE"

The self contained radio control unit (complete with receiver, relay, actuator mechanism and battery compartment) which is used in the *British Adventurer* will also be supplied as a separate unit to modellers who wish to use it in models of their own construction. It is known as the Tri-ang "Radioslave."

If used for a small model it will give rudder and engine control, and indeed drive the ship. But it may also be used, for steering control only, in large models; for instance, in large diesel power boats. For this purpose a small attachment is supplied with the "Radioslave" which connects to its main drive shaft and enables the "slave" to give a positional rudder control in which a continuous signal sends the rudder in one direction, a pulsed signal of 1 : 1 mark/space ratio holds the rudder stationary, whereas in the absence of a signal the rudder moves in the other direction.

THE RECEIVER

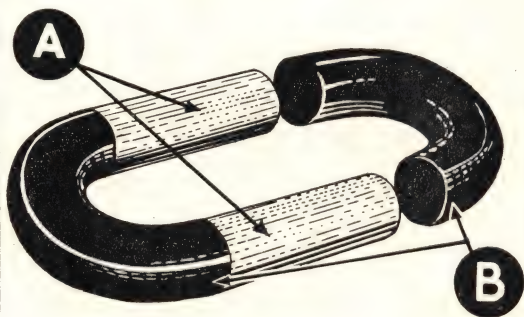
The receiver which is used in this equipment is also of an entirely new design. It employs a single sub-miniature hard valve which is wired into the circuit. The standing current of this valve is about 2.3 mA and this drops to about 0.7 mA on keying the transmitter. The circuit itself is printed in solid silver on high grade bakelite. But the most interesting part of the receiver is probably the relay. For this is a newly designed unit which claims to be the first sensitive model control relay which is fitted with *double-pole* change-over contacts. The immeasurable advantage of this is that the relay can be used for

reversing an electric motor using only one battery. For if a single-pole relay is used for reversing an electric motor two batteries must be used. Since owing to the very small movements and forces at one's disposal in a sensitive relay it is not possible to let one armature actuate two sets of contact blades, the problem here has been solved by having two independent armatures which are suspended inside a single electromagnetic coil. The relay, incidentally, is polarised and has a coil resistance of 7,000 ohms. It is a very sturdy unit which has been designed primarily with an eye to reliability at some sacrifice at the point of weight and size. The company state that they intend to market both the receiver and the relay as separate units for the experimenter and home constructor.

The prices given at the Toy Fair were: boat with transmitter complete £14 14s.; transmitter alone £6 6s.; "Radioslave" alone £5 18s. 9d.; receiver with relay in polystyrene case £3 17s. 6d.; relay alone £1 8s. (all retail and including P.T.).

10/- hints...

MODEL CARLEY FLOATS sent in by H. V. YOUNG



A model of a Carley Float is easy to make if this suggestion is followed. Materials needed are a smooth tread model car tyre and a piece of dowel that is of uniform diameter with the tyre.

The tyres used by the makers of "Dinky Toys" are ideal as they may be purchased separately from most model dealers. Here are the easy stages:

- (1) Take a razor blade and slice the tyre into two exact halves.
- (2) Cut the dowel in two pieces of the same length.
- (3) Glue the dowels (A) to the tyre halves (B) as shown in the illustration to make the basic shape.
- (4) Finish off the float to the required degree of detail.



BLUE WATER VAGABOND

By Dennis Puleston, price 10s. 6d. net.

THE FIGHT OF THE FIRECREST

By Alain Gerbault, price 8s. 6d. net., published by Rupert Hart-Davies Ltd., 36, Soho Square, London, W.1.

These two books are the latest additions to the well-known Mariners Library, being Nos. 27 and 28 of the series. In "Blue Water Vagabond" the author tells us of his early ambition to sail a boat, of how he and his friend saved up enough money to buy one, of sailing over to the West Indies where their money gave out and they were forced to become farmers. When a hurricane destroyed their farm they undertook to sail a 57 ft. schooner to New York. However, a gale drove them ashore near Cape Hatteras. In New York the pair parted, one to get married and the author to pick up a schooner in Newfoundland and help sail her to the West Indies to hunt for treasure from a sunken galleon. Next he joined the Fahnestock brothers on their 60 ft. schooner *Director* as navigator for a cruise among the Pacific Islands. Their adventures in the Marquesas, Tahiti, Samoa and the Fiji Islands make fascinating reading. Ultimately the author had to return to the colder northern climate on account of his health, so he made his way to China, where he understood he could get a boat built quite cheaply. However, the war with the Japanese intervened and he was just able to get away on the Trans-Siberian Railway through Russia, and so back to his home in England. The story would be hard to beat for adventure and variety of experiences. The text is well written, the photographic illustrations are well chosen and the book as a whole is most interesting and enjoyable.

The second book, "Fight of the Firecrest," was first published in 1926, and has for many years been a classic on single-handed sailing. The author was one of the first men to cross the Atlantic from east to west, single-handed in a small boat. He learned his lessons the hard way, lessons which have been invaluable to the many who have followed his example since that time. His ship, the *Firecrest*, a narrow and deep English cutter built in 1892 and 39 ft. long overall, stood up to the trip quite well, but her gaff rig was unsuitable, and her rather ancient suit of sails gave constant trouble. The author has made a wonderfully complete record of his trip, and is perfectly candid about his mistakes, which were mostly due to inexperience. It is this which makes the book so valuable to the sailing man. Normally his ship needed someone continually at the helm, so he had to heave-to at night, but ultimately he devised a sail combination under which the ship sailed herself with the tiller lashed and which enabled him to sail her the full 24 hours. He had trouble with his drinking water through storing it in new

wooden casks, and found himself with 2,500 miles to go and only 15 gallons of fresh water. Then he found that his salt beef, at least that below the top layer of the cask, was of inferior quality, and when he could no longer stand the taste or the smell he had to throw it overboard. After that he lived on what fish he could catch, which he did until the one-sided diet affected his health. He had some terrific experiences with gales in the hurricane zone as he approached America. On one occasion he had to take to the rigging on the approach of a huge wave which completely buried the hull and gave him anxious moments until she rose again and freed her decks of water. A hundred and one days after leaving Gibraltar he anchored in New York, where he had a wonderful reception. This is certainly a book to read and re-read, and one which should occupy an honoured place in every ship-lover's library.

CLOSE TO THE WIND

By R. S. Porteous, published by Angus and Robertson, Sydney and London, price 12s. 6d. net.

This is a collection of sea stories by a well-known Australian writer. It is obvious that he has first hand knowledge of the things of which he writes, and is moreover a writer of high literary quality. The stories, which are eleven in number, are based on and around the coast of Queensland, and deal chiefly with the small and frequently antiquated steamers to be found there, and with the men who constitute their personnel. They include stories of shipwreck, stranding, salvage, gun running and various other aspects of seafaring life, and some detective stories. The detective stories, being connected with seafaring, are distinctly out of the ordinary, and are very cleverly worked out. Some of the stories have a humorous flavour, the one on "High Finance" being very amusing. The last one "Experience" tells of how the second mate and the very junior chief engineer of a small and very old steamer, which they were delivering to purchasers in China, got the ship off after she had gone ashore, largely with the co-operation of a rabid Communist deckhand with whom the second mate had previously had trouble. In bringing her into Hong Kong they found that she wasn't salvage as they thought but that, as the crew of a stranded vessel, they were in duty bound to do all they could to refloat her, in spite of the fact that the master and mate had left her thinking she was a wreck. All the stories are interesting and the book as a whole is first class reading.

Our Cover Story

Our cover picture this month is from a photograph taken by Mr. Gordon S. Smith on board the T.S.S. *Olympia*, a voyage in which is described on pages 118-9 in this issue. As will be realised it was taken from the docking bridge at the stern with passengers studying the rather turbulent wake. The "*Olympia*" has now been taken off the Atlantic run and is doing luxury cruising in the Mediterranean.

news from the clubs...

THE THAMES SHIPLOVERS' SOCIETY

The meeting at the Baltic Exchange on February 25th commenced with a film, "The Story of the *Queen Elizabeth*," showing the building of the ship and giving some account of her career as a troopship during the war. The film concluded with her refit and the fresh trials when she was handed back to the Company. A second film, "Getting There is Half the Fun," was also shown. This was the story of a recent voyage on the *Queen Elizabeth*. Both films, which were in colour and which were kindly lent by the Cunard Steamship Co. Ltd., were greatly enjoyed. At the meeting in the East Holborn Library on February 11th, Mr. A. L. Tucker gave a talk entitled "Ships Draughts," at the National Maritime Museum, illustrated by prints from the actual drawings. The collection numbers about 2,000 original draughts of naval ships from about 1700 to 1837. A catalogue which gives a good cross section of the collection may be obtained from the Museum, price 1s. and prints and photographs of the drawings are obtainable. Mr. Tucker also stated that a further large collection of draughts has been given to the Museum by the Admiralty, these including all the ships from 1837 to 1914.

The meetings for April are: on the 15th at the East Holborn Library a talk on photographing ships, with examples of members' own work; and on the 29th at the Baltic Exchange, a colour film on the Port of Bristol, which will be introduced by Mr. J. T. Reed, London Representative of the Port.

The annual Sailing Rally for 1955 will take place on Sunday, June 12th, and the venue will be The Round Pond, Kensington Gardens, W.2. Further particulars are obtainable from the new Hon. Secretary: ERIC C. RANDALL, 24, Winter Avenue, East Ham, E.6.

MODEL YACHTING ASSOCIATION

The British Open Championships for the five classes recognised by the Association will be as follows:—

May 28th, 29th, 30th	10 Rater	Birkenhead.
August 7th to 13th	A class	Fleetwood.
To be followed immediately by a race for the Y.M. Cup.		
July 16th and 17th	36-in. res.	Poole.
September 10th and 11th	M class	Hove.
September 24th and 25th	6 metre	Fleetwood.

Y.M. 6m. O.A. & SOUTH LONDON M.Y.C.

The following events have been arranged:

Date	Class	Event	Start
April 9th	36-in.	Open Sweepstake	2.30
10th	A	Team Race (Pre-war v. Post-war)	2.00
11th	10 R	Surbiton 10 Rater Regatta (Open)	10.30
17th	A	Gosnell Trophy (Open)	10.30
30th	M	Team Race (under 30 v. over 30)	2.30

Sailing water, The Rick Pond, Home Park, Hampton Court.
Hon. Secretary: N. D. HATFIELD, 132, Westbourne Grove, West-cliff-on-Sea, Essex.

WORLD SHIP SOCIETY, LONDON AND HOME COUNTIES BRANCH

The next meeting of this branch will be held on Wednesday, April 6th, at the "Two Brewers," 74, Shoe Lane, London, E.C.4, commencing at 7.15 p.m. Mr. Donald J. Anderson will give a talk on the recent "Campbell's Pleasure Steamers Exhibition," at Bristol. Members and shipping fans welcome. Branch Secretary: Mr. J. R. DANIELL, 51, Little Marlow Road, Marlow, Bucks.

WORLD SHIP SOCIETY, MERSEYSIDE BRANCH

The April meeting will be held on Friday, the 29th, at 7.30 p.m., at the Incorporated Accountants Hall (London Life Association Building), 25, Fenwick Street, Liverpool, 2. A talk—"The 'Scottish' Navy—the Story of the Clan Line"—will be given by Mr. A. G. Collingwood. Visitors—ladies or gentlemen—are welcome. Hon. Secretary: S. G. DOCKER, 172, Morningside Road, West Derby (Tel.: Stanley 4227), will be happy to supply further information on request.

LIVERPOOL NAUTICAL RESEARCH SOCIETY

The next meeting will be held on Thursday, April 14th, when Mr. Roderick A. Stephenson, A.M.I.C.E., will give a talk: "The Development of the Liverpool Dock System." Meetings are held on board the *Landfall*, Canning Dock, Liverpool, commencing at 7.30 p.m. Particulars of the Society may be obtained from the Chairman: R. B. SUMMERFIELD, 28, Exchange Street East, Liverpool 2.

NORFOLK NAUTICAL RESEARCH SOCIETY

The following meetings will be held in April: Tuesday, the 5th, two short talks by members: "Ships Lines and Model Ships" by Mr. F. H. Denton, and "Elementary Research Work" by Mr. A. A. Purves. Tuesday, the 26th, a talk entitled "The Battle of Trafalgar," by Rear Admiral A. H. Taylor, C.B., O.B.E., D.L., J.P., illustrated by strip film.

The meetings are held in the Lecture room at the Castle Museum, Norwich, (by permission of the Museum Committee) at 7 p.m. A welcome is extended to all who are interested. Hon. Secretary: JOHN F. C. MILLS, Opie House, Castle Meadow, Norwich. Tel.: Norwich 23241.

HAMMERSMITH SHIP MODEL SOCIETY

The following meetings will be held at "Westcott Lodge," Lower Mall, W.6, commencing 7.30 p.m.: Tuesday, April 5th, there will be an annual Miniature Competition, and on Tuesday, April 19th, Mr. W. E. Down will speak on "British Shipbuilding." Information about the activities and future meetings of this Society may be obtained from the Secretary: H. J. COSTER, 98, Craven Park, Harlesden, London, N.W.10.

THE BRISTOL SHIPLOVERS' SOCIETY

The following meetings will take place: Tuesday, April 5th, "Nautical Film Show," Col. Sgt. James, R.M. Tuesday, April 19th, "The White Funnel Fleet," Messrs. P. & A. Campbell.

The meetings are held in the Bristol Sailors' Home, Queen Square, and commence at 7.15 p.m. Hon. Secretary: F. C. WATTS, Fifth Avenue, Northville, Bristol 7.

CLYDE SHIPLOVERS' AND MODEL MAKERS' SOCIETY

The annual general meeting to elect office-bearers for 1955-56 will be held at the Kelvingrove Art Galleries on April 11th. Visitors cordially invited. Hon. Secretary: DAVID J. CALDERWOOD, C.A., 89, Gibson Street, Hillhead, Glasgow, W.2.

THE WEMBLEY SHIP MODEL SOCIETY

As it is Easter Monday there will not be a meeting on April 11th. On Monday, April 25th, Mr. R. Ing will be talking on "Radio Control of Models." The meeting will be held at the Bonhomie Tennis Club, 28, Harrowdene Road, North Wembley, at 8 p.m. Hon. Secretary: EWART C. FREESTONE, 41, Daryngton Drive, Greenford, Middlesex.

LEEDS—A NEW SHIP MODEL SOCIETY

A number of people are endeavouring to form a S.M.S. in Leeds and invite anyone in the district who may be interested to write to: MR. ARTHUR SHARP, 50, Primley Park, Alwoodley, Leeds.

OBITUARIES

Major G. B. Lee

It is with sincerest regret that we received the news, that Major G. B. Lee passed away in the Royal Hotel, Portsmouth.

Major Lee was a model yachtsman of many years standing, being a member of the Y.M. 6m. O.A. and also their racing secretary. Upon his retirement, he moved to Gosport and became a member of that club. He very kindly took on the job of Editor of the M.Y.A. News and immediately raised this modest publication to a higher standard of news and make up. It was with general regret that he recently resigned as Editor as he wanted to devote his time to the designing of a new "A" Class boat. Of retiring nature, his views were, however, very definite on many aspects of model yachting. Model yachtsmen mourn the loss of a fine comrade.

J. Alexander

Hard upon the above news, we learn with no less regret, the passing away of Mr. J. Alexander, Senr. Well known throughout the world as the founder of J. Alexander & Sons, model yacht racing specialists and suppliers of all the needs of model yachtsmen, he was a designer of no mean ability in all the recognised classes. His many successes with his boats proves this beyond any doubt. His "White Heather" "A" class boats were always ones to be respected in the National Championships and in 1939 his *Heather Glen* won the "A" class championship and also the "Y.M. Cup," beating the renowned Sam Berge's *Viking* and four other Continental competitors at Fleetwood. A typical Scot, he was a loyal friend and good sportsman.

● Letters of general interest on maritime matters are welcomed. A nom-de-plume may be used if desired, but the name and address of the sender must accompany the letter. The Editor does not accept responsibility for the views expressed by correspondents



A MODEL TRAWLER

I am enclosing a photograph of my working model steam trawler that I hope may be of interest.

The model was built from a Bassett-Lowke plan by Harold Underhill. The hull is built on the bread-and-butter system from obeche. Bridge, fiddley and galley are made from sycamore. The engine is a Bassett-Lowke "Eclipse steam engine 7/10" stroke and bore. A twin drum boiler from the same firm provides the steam.

I would have enjoyed making my own engine but I do not possess a lathe. Trawl winch, windlass, galleys and ventilators were built up from odd scraps of brass or copper.

The model is 30 in. long on the deck, and is of 14.86 lb. displacement.

I have sailed the model on the sea and she seems very stable and runs well, but there is a tendency for the engine to prime badly, and after about the full fifteen to twenty minutes running, there is about an inch or more of water in the bottom. The exhaust is led into the funnel.

Torquay.

D. W. GREENSLADE.

OLD IRON SHIPS

It is a remarkable fact that quite a few old iron vessels are still washing around the seven seas in this atomic age. The grandfather of all steamers is the Finnish coaster *Finland* of Abo, a trim little vessel of 299 tons, built at Hull as long ago as 1855; she will soon attain her centenary. Another Finnish veteran is the motor vessel *Gustaf*, a former sailing ship of 431 tons, dating from 1877; she has traded to all parts of the world. The old Finn tramp *Ellen* is a sturdy ship of 1,597 tons and she dates from 1878. The oldest steamer under the Swedish flag is the trim *Ingvar*, a handy tramp of 1,071 tons, and she was launched as long ago as 1879. A regular trader to London river is the Spanish tramp *Cementos Rezola No. 1*, a hard-working ship of 832 tons, dating back to 1882. The oldest seagoing ship under the red ensign is the steamer *Rumney*, a vessel of 1,391 tons; she was launched away back in 1899. How these old ships can earn a livelihood in the face of competition from modern tonnage is beyond my comprehension.

Falkirk.

JOHN ANDERSON.

REQUEST

Could any reader help me by supplying information about the steamers of the upper Thames of any period prior to 1939. They were owned by such firms as Joseph Mears, Queens of the River, Salter Brothers, Maynards, etc. Twickenham Park.

G. N. WILLSHIRE.

DIARY DATES

Perhaps the following advanced information may assist fellow model enthusiasts to arrange dates for the forthcoming year.

The first is for those who want to see the "experts" operating various forms of model. They have a unique opportunity to do so on April 23rd (Saturday) at the West Moors Army Depot of the R.A.S.C. West Moors is only a few miles from Ringwood and not far from Bournemouth. The Commanding Officer, a friend and old confrere of mine, is laying on an open day for the public in the barracks, with a view to enthusing the soldier in model making as a spare time hobby, and a friendly get together between soldier and civilian, a laudable dual object. There will be a series of model events to suit the tastes of most people, and if the weather is kind this should be a unique show, well worth travelling quite a way to see. It should form a very pleasant and worthwhile outing. Ladies are welcome. The events speak for themselves. Firstly there is a static display of model aircraft and yachts, and building, going on, indoors. This is followed by a demonstration of around 100 m.p.h. model jet flying in a cage, staged by Messrs. Wilmot Mansour and Co. Ltd. (Jetex). The next item is a control line display of aerobatics by Mr. Phil Smith, the Veron kit designer and member of the Bournemouth Model Aircraft Society. Then a sailing display on the barrack pond, with multi-channel radio operation of boats. After that, jet flying out of doors, including helicopters, fixed wing aircraft, and a space ship, will be given by Wilmot Mansour Ltd. To end up the proceedings there will be a display of multi-channel radio controlled flying by our old friend Mr. George Honnest Redlich, of Messrs. E.D. Ltd., the man who pulled off the dual feat of flying and power boating in the model field, across the English Channel. This should be a day full of interest!

My second point relates to the now well-established annual radio regatta by the Poole Model Yacht and Power Boat Club, on Poole Lake, a two-day affair—June 25th and 26th. This year an earlier start on the Saturday will be made to cover extra events—10 a.m. is the witching hour. Besides the usual power steering events, now somewhat stiffened up, and the novelty event when the team putting up the most eye-catching show in seven minutes win, there will be a chance for all types of radio model yacht racing. In order to encourage development along each avenue of radio yacht racing, there will be three different events of yacht race staged on a longer course, which should encourage good racing rather than mere steering tricks.

Thus the Bravery Challenge Cup will be given to encourage those who are experimenting with vane and Braine devices to control sheets, etc. This is what may be termed "Mechanical Sailing," in which the radio is used to steer only, whilst the automatic devices handle

sheets, etc. It robs the helmsman of much of his personal skill, but has the advantage that more boats may ultimately be raced together. It is used in America, where the sails are controlled by wind vane and electric motor. All the helmsman has to do is to steer his yacht left and right like a power boat. Those interested in mechanical control for its own sake have wide scope in this form of racing. It is known that several such yachts are now being developed, and as size varies considerably, and the radio systems vary, a handicap race has to result, but class racing may develop in the following year as a "Mechanical Sailing" branch of the sport.

The Taplin Challenge Cup is for ten rater and "A" class size yachts sailing together using the normal rules and tactics of racing, two at a time with a final heat. In this race no mechanical automatic assisting devices are permitted. The helmsman must control his sheets and rudder by radio, thus emphasising personal sailing skill like the real thing. In full-size yacht racing, the chief allure of racing is of course this personal test of skill in handling rudder and sheets, and this race is intended to provide a similar test. The rules will be the well-tried full-size Royal Yacht Association racing rules.

In order to encourage the popular Marblehead Class 50 in. yachts to race together by radio, a special race will be laid on for this class, provided that yachts do not interfere with each other from the radio angle. The conditions of racing are the same as for the Taplin Trophy. Bournemouth. LT.-COL. C. E. BOWDEN.

CORRECTION

An apology is due to Lieut.-Commander. G. C. Chapman, R.N., as in my articles and drawings of an "Algerine" class minesweeper in the last two issues, the length overall is given as 235 ft. which is the figure published in successive editions of Jane's Fighting Ships. In Lieut.-Commander Chapman's articles (April to July, 1952) the length overall is given as 225 ft. and on enquiry the Admiralty confirms this figure. So my drawing is too long by 10 ft., which at the scale of $\frac{1}{8}$ in. = 1 ft. equals $1\frac{1}{4}$ in. London. NORMAN A. OUGH.

RADIO CONTROL EQUIPMENT

In your Radio Control Notes in the January issue of SHIPS AND SHIP MODELS you describe a repeater motor used by Peter Cummins. It may be of interest to your readers to know that miniature "design" motors, which are similar in principle to those used in *Conrad*, are currently available on the surplus market.

The "Wind Finding Attachment" advertised by Proops Bros. of 52, Tottenham Court Road, at 8s. 6d. each, contains two such motors, size $1\frac{1}{2}$ in. long by 1 in. dia. They are probably designed for 24 volt operation but are reasonably satisfactory on 12 volts. It is, of course, possible that by the time this appears in print, stocks may be sold out. Chalfont St. Peter. H. R. CLAYTON.

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Tug <i>Redcroft</i> , 30 in. hull.	5 $\frac{3}{4}$ in. beam	... 14/-
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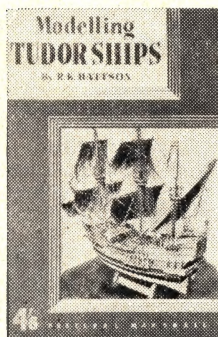
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SHIPS IN BOTTLES, sail or steam.—D. BARKER, 46, Grove Lane, Hale, Altrincham, Cheshire.

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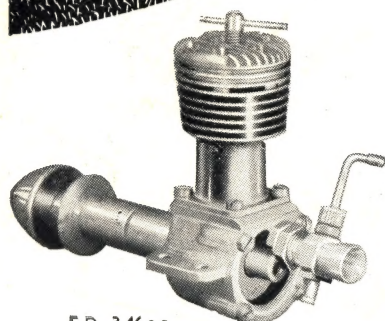
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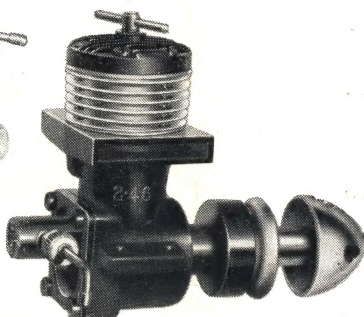


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